REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	05/00/86	

4. TITLE AND SUBTITLE
PHASE II, SECTION 36, TASK 1, DRAFT FINAL SOURCE REPORTS, 36 UNC, 36-3, AND 36-17

5. FUNDING NUMBERS
DAAK11 84 D 0016

6. AUTHOR(S)

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
ENVIRONMENTAL SCIENCE AND ENGINEERING
DENVER, CO

8. PERFORMING ORGANIZATION REPORT NUMBER
87014R21C

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
ROCKY MOUNTAIN ARSENAL (CO.). PMRMA
COMMERCE CITY, CO

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/AVAILABILITY STATEMENT
APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED

12b. DISTRIBUTION CODE

13. ABSTRACT (Maximum 200 words)

THIS REPORT DOCUMENTS THE PHASE I CONTAMINATION SURVEY OF SITE 36-17 WHICH WAS USED FOR DISPOSAL OF SOLID WASTES IN PITS AND TRENCHES.

99 SAMPLES FROM 46 BORINGS WERE ANALYZED FOR VOLATILE AND SEMIVOLATILE ORGANICS AND METALS WITH SEPARATE ANALYSES FOR HG, AS, AND DBCP. HIGH LEVELS OF CR, CU, ZN, DLDRN, ENDRN, DIMP, CLDAN, DBCP, CPMS, AND ALDRN WERE DETECTED IN THE SAMPLES. METAL ANOMALIES WERE ALSO DETECTED AT THE SITE.

AN EXTENSIVE PHASE II PROGRAM CONSISTING OF 40 ADDITIONAL BORINGS AND MORE GEOPHYSICAL INVESTIGATIONS IS RECOMMENDED TO BETTER LOCATE THE DISPOSAL TRENCHES. THE VOLUME OF CONTAMINATED MATERIAL PRESENT IS ESTIMATED AT 2,603,000 CUBIC YARDS.

APPENDICES: PHOTOGRAPHS, PHASE I ANALYTICAL DATA.

14. SUBJECT TERMS	15. NUMBER OF PAGES
GEOLOGY, HYDROLOGY, ANALYTES, SOIL SAMPLING, CONTAMINATION ASSESSMENT	16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
UNCLASSIFIED			

87014R21C
ORIGINAL

LITIGATION TECHNICAL SUPPORT AND SERVICES

ROCKY MOUNTAIN ARSENAL

PHASE II SECTION 36

DRAFT FINAL SOURCE REPORTS 36-UNC, 36-3, AND 36-17

TASK NUMBER 1 (36-17)

MAY 1986

ENVIRONMENTAL SCIENCE AND ENGINEERING

PROGRAM MANAGER'S OFFICE FOR ROCKY MOUNTAIN ARSENAL

87014R21C
ORIGINAL

LITIGATION TECHNICAL SUPPORT AND SERVICES

ROCKY MOUNTAIN ARSENAL

PHASE II
SECTION 36

DRAFT FINAL SOURCE REPORTS
36-UNC, 36-3, and 36-17
MAY 1986

CONTRACT NUMBER DAAK11-84-D-0016
TASK NUMBER 1

ENVIRONMENTAL SCIENCE AND ENGINEERING, INC.
HARDING LAWSON ASSOCIATES MIDWEST RESEARCH INSTITUTE

PREPARED FOR

US ARMY

PROGRAM MANAGER'S OFFICE FOR

ROCKY MOUNTAIN ARSENAL

SOURCE 36-17: COMPLEX DISPOSAL ACTIVITY

1.0 PHYSICAL SETTING

1.1 LOCATION

This source is characterized by a variety of disposal practices in numerous areas with overlapping boundaries and imprecise history. This site contains both a northern and southern section and is approximately 107 acres in size (Figure 36-17-1a and 36-17-1b). For the most part disposal of solid wastes in trenches and pits has occurred. The following information has been obtained for Source 36-17:

Estimated Areal Extent = 4,685,000 ft^2
Estimated Vertical Extent = 15 ft
Estimated Volume = 2,603,000 yd^3 (RMACCPMT, 1984)
Revised Areal Extent = 4,181,000 ft^2

As a result of program changes the areal extent of Source 36-17 was revised. Program changes include reduction of the scale of investigation at Sources 36-9 and 36-16 which are both contained within Source 36-17N. Sources 36-9 and 36-16 were categorized as an Incendiary and Munitions Test Site and an Incendiary Burn Site, respectively. Both sources were believed to have resulted from Army activities. During Phase I, these sources were considered part of Source 36-17. The southern portion of Source 36-17 was reduced in extent due to the expansion of Source 36-3. The revised Source 36-17 areal extent is cited above. Evidence of disposal activities is clearly visible within this site. Two open trenches exist in Source 36-17N. Broken vials and other debris are found in Source 36-17S, just south of Source 36-3 in what has been referred to as the "baby bottle area". Views north and west for Source 36-17N and northwest and southwest for Source 36-17S are shown in photographs in Appendix 36-17-A.

1.2 GEOLOGY

This source, located in the eastern half of Section 36, is divided into a northern and southern sector and extends almost the entire length of

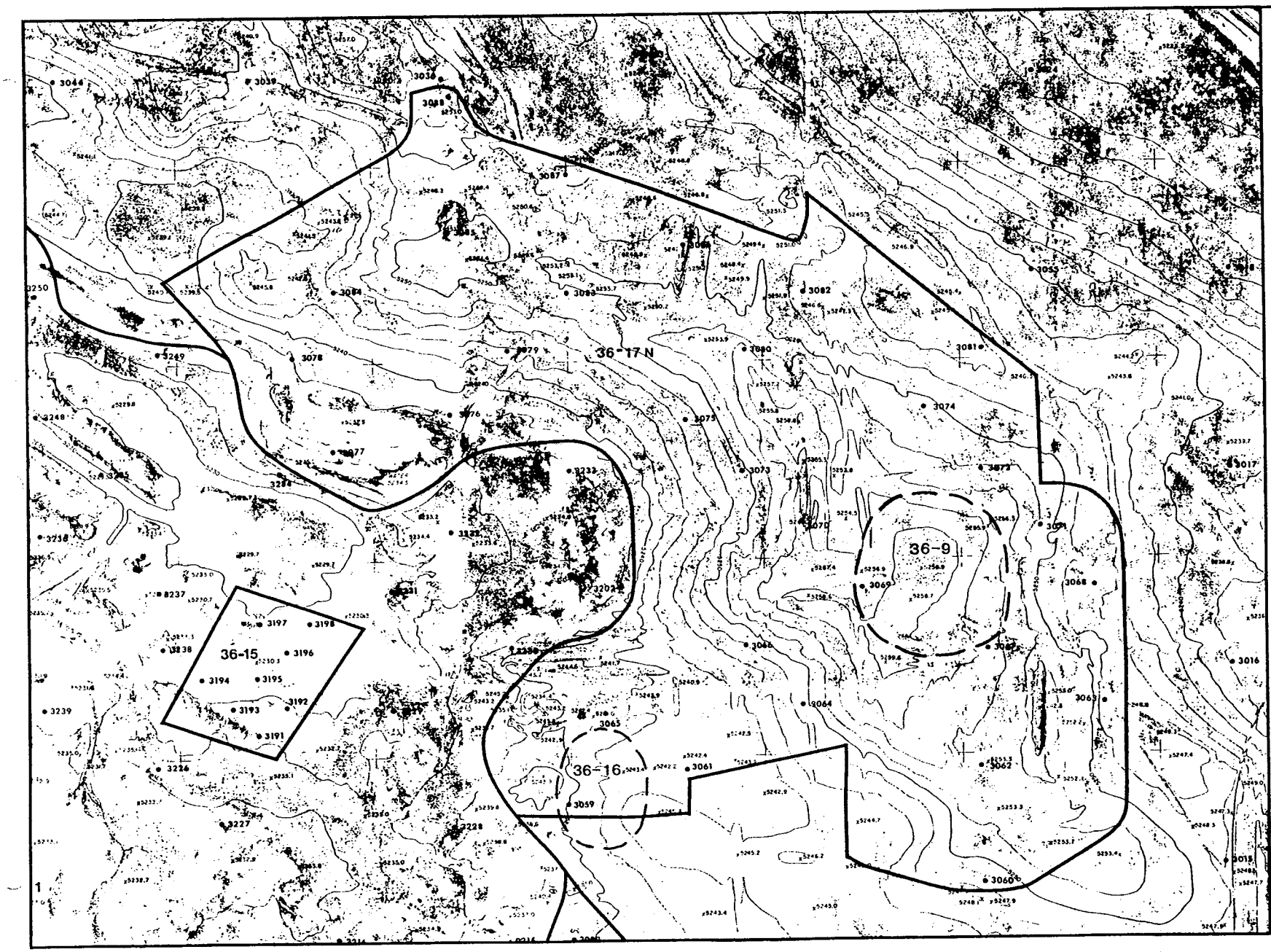


Figure 36-17-1a
SOURCE 36-17N
PHASE I INVESTIGATION
BORING LOCATION MAP
RMA, SECTION 36

Prepared for:
U.S. Army Program Manager's Office
For Rocky Mountain Arsenal
Aberdeen Proving Ground, Maryland

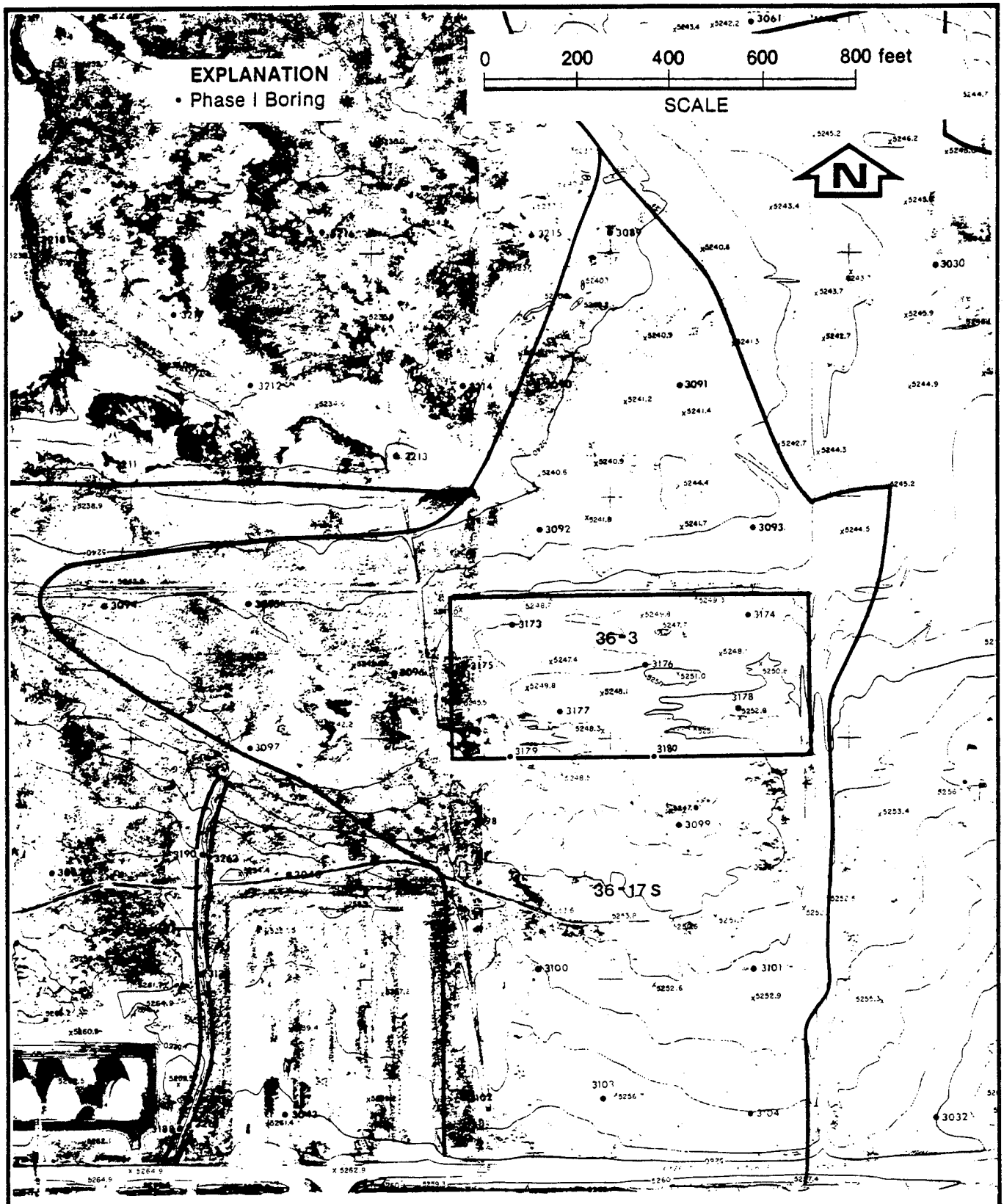


Figure 36-17-1b
SOURCE 36-17S, PHASE I INVESTIGATION
BORING LOCATION MAP
RMA, SECTION 36
SOURCE: ESE, 1986

Prepared for:
U.S. Army Program Manager's Office
For Rocky Mountain Arsenal
Aberdeen Proving Ground, Maryland

Section 36. The center of Source 36-17N sits on a bedrock high. Alluvial thickness beneath this site was reported at 20 to 30 ft, with the thickest alluvium closest to Basin A. This alluvium is largely silty sand. The underlying Denver Formation consists of interbedded clays, silty sand, and organic rich clays. Ground water flow is generally to the north/northwest.

Alluvium thickness in Source 36-17S was also reported at 20 to 30 ft, but the alluvium consists of interbedded clays and silty sands. The Denver Formation, as in most locations, consists of interbedded silts, silty sands, clays, and organic rich clays.

The Phase I boring program results indicate that the source is underlain by alluvial materials consisting of interbedded silts and silty sands. These materials were encountered to the depths explored in Source 36-17S, however, bedrock was encountered beneath Source 36-17N at depths ranging from 11 to 17.5 ft. Boring logs representative of Source 36-17 are presented in Figures 36-17-2 and 36-17-3.

1.3 HYDROLOGY

Surface waters from Source 36-17N may drain towards Basin A in the west and towards First Creek in the eastern portion. Surface waters from Source 36-17S drain northeastward towards First Creek from most of this site. Ground water flow is generally to the north.

The water table was encountered in eight borings, seven of which were located in Source 36-17S. A summary of the depth to water table and estimated water table elevations is presented below:

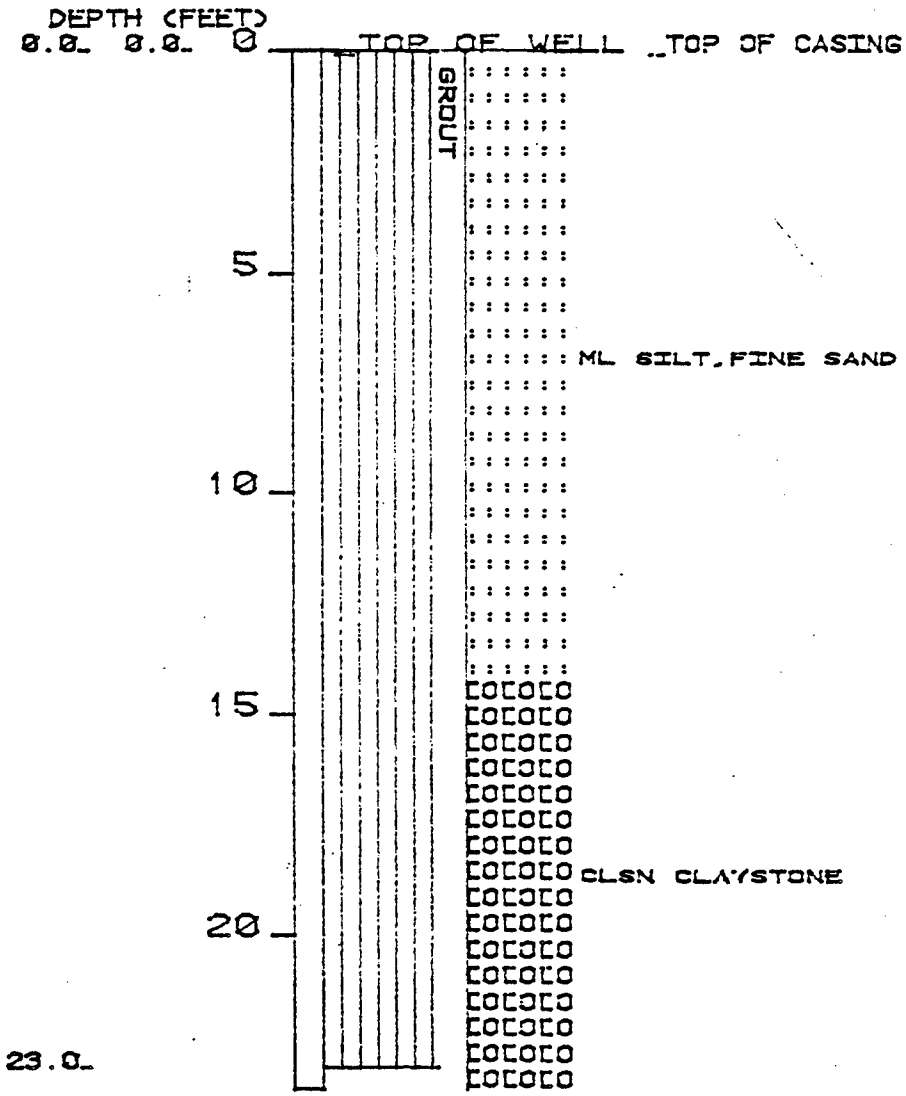


Figure 36-17-2
FIELD BORING PROFILE FOR
BORING 3067

SOURCE: ESE, 1986

Prepared for:
U.S. Army Program Manager's Office
For Rocky Mountain Arsenal
Aberdeen Proving Ground, Maryland

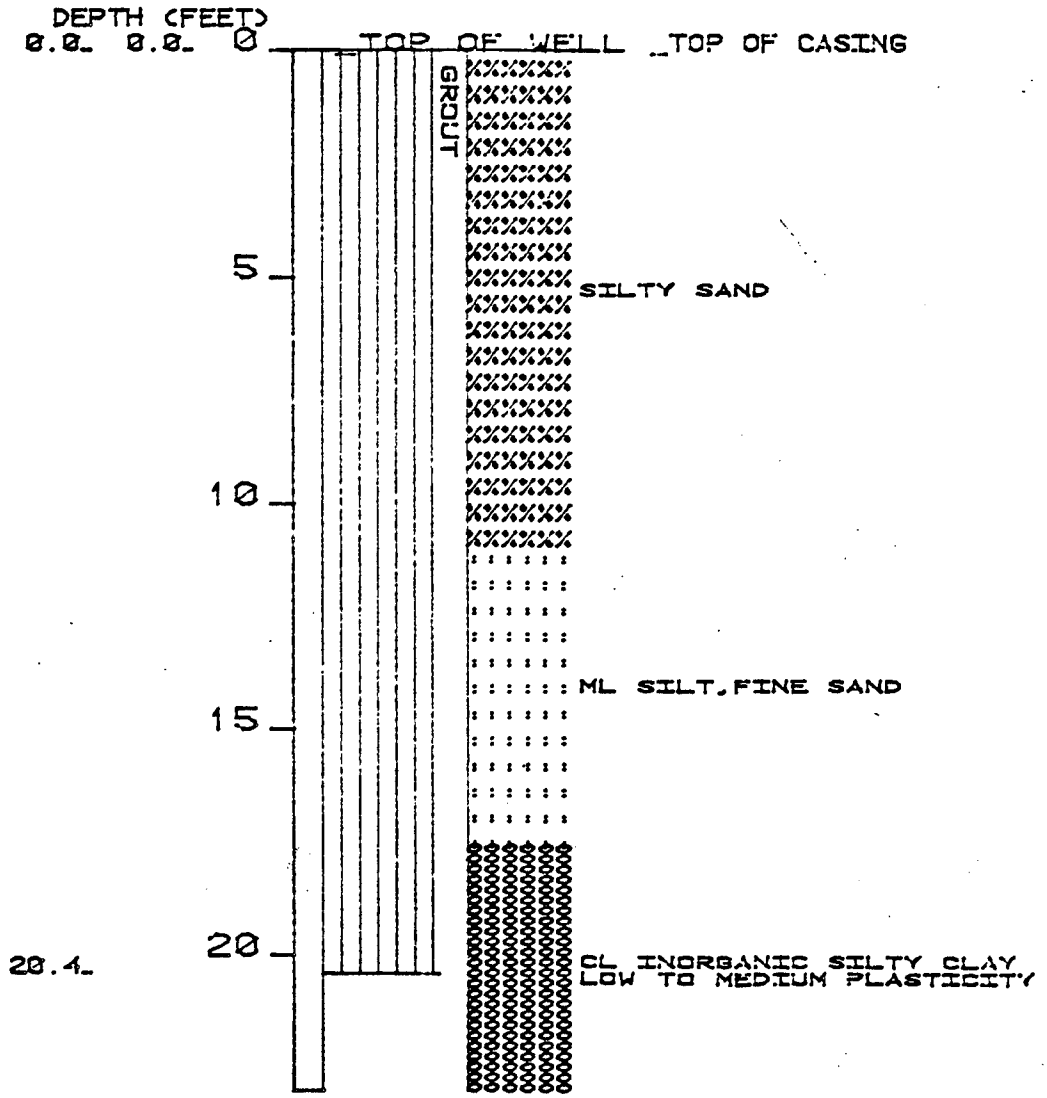


Figure 36-17-3
FIELD BORING PROFILE FOR
BORING 3083

SOURCE: ESE, 1986

Prepared for:
U.S. Army Program Manager's Office
For Rocky Mountain Arsenal
Aberdeen Proving Ground, Maryland

Boring	Depth to Water (ft)	Estimated Ground Water Elevation*
3084 (36-17N)	14.5	5229.0
3090	4.5	5235.0
3092	4.0	5237.5
3093	6.0	5236.0
3094	4.0	5239.0
3095	4.6	5237.0
3097	4.0	5241.0
3098	4.5	5244.0
3099	4.0	5243.5

* Rounded to nearest 0.5 ft

The estimated ground water elevations were determined using unstabilized water levels and the top of boring elevations. The data presented is in general conformance with the projections presented in the Task 1 Technical Plan.

Ponded surface water was observed directly east of Boring 3077 and south of Boring 3076. At the time of drilling there were no signs of the source of this water, however, there is a light northwest trending drainage that enters the area.

2.0 HISTORY

Disposal activity in this area was observed in the first aerial photograph of Section 36, dated 1948. Activity in this source area continued from this date through 1975. On the 1948 photo several disposal activities have been observed. In the northern portion of Source 36-17 a large bare area existed, but only two trenches were visible. In the center of this northern portion of Source 36-17, disturbances showed the existence of eight to twelve trenches. A portion of this area was used for burial of M-17 incendiary devices. The southern portion of this source remained undisturbed with the exception of activity within the Source 36-3 area where insecticides were being disposed.

The 1950 aerial photograph showed no new activity in the southern portion of this source and minimal activity in the northern portion. The site, which appeared to contain most of the trenches in 1948, appeared to be completely disturbed. The central area of the northern portion of Source 36-17 contained four round pits and four irregular dark patches which were former pools or spills.

The 1953 aerial photo showed increased trenching activity in the northern sector. One new pit and fifteen new trenches appeared in the north-northwest portion of this sector. At least two new trenches were added in the central portion of the northern sector of Source 36-17. Two new disturbed areas were also visible in the northern part of the southern sector.

The 1958 photograph showed no new activity in the southern sector, but many new trenches in the northern sector of Source 36-17. At least six new pits and fourteen new trenches appeared mostly concentrated along the western portion of this source, close to the Basin A high water mark. One large pit and several bare spots also appeared in the western portion of Source 36-17. The 1962 photo showed the addition of eleven new trenches and six new pits in Source 36-17N.

The 1975 photo showed new activities occurred in areas already occupied by previous trenches and pits. Therefore, old sites were covered and new ones were cut on a fairly routine basis. In general, half of the new trenches (about 20 trenches and several pits) in Source 36-17N were further east than the trenches apparent in the 1962 photo.

Source 36-9 was used for the testing and disposal of incendiary munitions. These munitions were reportedly ignited on the ground surface and in shallow trenches. Following burning the trenches were backfilled. The 1948 aerial photo shows activity at this site but no new activity was observed from 1950. Source 36-16 was also a primary disposal area for incendiary munitions. Many trenches and pits were observed in aerial photographs from 1948 through 1975.

3.0 EXTENT OF CONTAMINATION

3.1 SOIL

3.1.1 Previous Soils Investigations

This area did not appear to be used for pesticide disposal, based on chemical analysis of soil samples collected under the OTSG Program. Contaminants found in relatively high concentrations were copper, zinc, arsenic, and mercury. No detectable pesticides were found in soils collected from a borehole to a depth of 17 ft. However, this single sample point does not ensure that pesticide disposal did not occur in this source.

3.1.2 Phase I Contamination Survey

3.1.2.1 Phase I Soil Boring Program

The source boundaries of Source 36-17 have been slightly modified as the result of aerial photograph interpretation and field observations resulting in a revised source areal extent of 4,181,000 ft^2. Based on a borehole spacing of 150 ft, a total of 46 Phase I borings were completed. Boreholes ranged in depth from 5 to 23.5 ft. A borehole location map is presented in Figure 36-17-1a and 36-17-1b.

Prior to commencing drilling operations, all boring locations were cleared in accordance with the surface geophysics program detailed in the Task 1 Technical Plan. A grid, 20 feet on a side was set up at each boring location and gradiometer readings were obtained at a spacing of 5 ft throughout the grid area. These data were used to produce contour plots of the vertical magnetic gradient. Based on the contour plots the boring was relocated elsewhere within the grid or left in its original location. A metal detector was then employed to determine if any metal was present in the near surface soils (0 to 2 ft) within 5 ft of the boring locations. If metal was detected the boring was relocated again and the process repeated until satisfactory results were obtained.

The geophysics program results for Source 36-17S did not indicate the presence of buried metal at any borehole locations. Both the gradiometer survey and metal detector scans were negative for buried metal.

A total of five borings (3065, 3070, 3074, 3075, and 3086) in Source 36-17N were relocated due to potential buried metal identified by the geophysical program. Two boreholes (3065 and 3070) were relocated due to anomalies present (indicative of buried metal) in the magnetic gradient plots (Figures 36-17-4 and 36-17-5). The remaining three borings were relocated due to the metal detector scans. The contour plots of Boreholes 3075, 3083, and 3086, as shown in Figures 36-17-6 to 36-17-8, display anomalies indicative of buried metal. However, these borings did require relocation due to the anomalies, because of their spacial relationship.

The sampling program at Source 36-17 consisted of 99 samples distributed as shown in Table 36-17-1. All samples were obtained using the drill rig and continuous coring method as described in the Task I Technical Plan. As explained therein, predetermined sampling intervals were established every 5 ft beginning with a 0 to 1 ft sample. In some cases field conditions such as obstructions or water table position forced some adjustment in these intervals. Extra samples were taken (Intervals X, Y, or Z) when the soil column exhibited visual anomalies. The Y interval at Boring 3086, for instance, was taken between the predetermined A and B intervals in an area where the soil column showed visual evidence of residue from burning. The chemical analysis confirmed this was probably the bottom of a burning pit for munitions disposal. All samples were subjected to analysis by GC/MS for semi-volatile organics, an ICP metals screen, and separate analyses for Hg, As, and DBCP. GC/MS analysis for volatile organics was performed on the deeper samples from selected borings.

3.1.2.2 Phase I Geophysical Investigations

Based on the complex disposal history and large areal extent of Source 36-17, a limited Phase I geophysical investigation was performed. The purpose of the investigation was to further define the approximate location and boundaries of the disposal trenches constructed in this source. Due to the lack of existing surficial evidence indicating the location of disposal trenches and pits, geophysical techniques were

Table 36-17-1. Sampling Intervals and Analytical Parameters for Source 36-17 (Page 1 of 2)

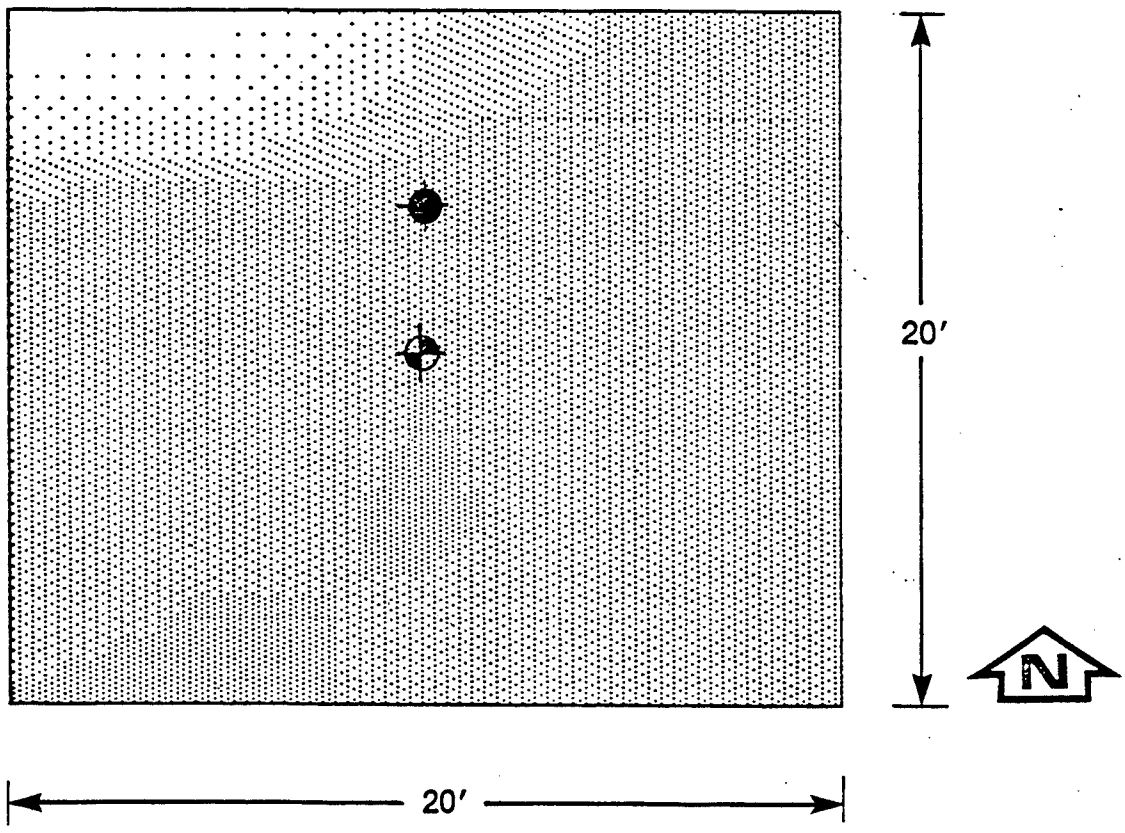
Bore Number	Sample Interval (ft) A	B	C	D	E	Analytical Parameters
3059	0-1	4-5	--	--	--	*
3060	0-1	4-5	--	--	--	*
3061	0-1	4-5	--	--	--	*
3062	0-1	4-5	--	--	--	*
3063	0-1	4-5	--	--	--	*
3064	0-1	4-5	--	--	--	*
3065	0-1	4-5	9-10	12-13(Z)	--	*
3066	0-1	4-5	--	--	--	*
3067	0-1	4-5	9-10	14-15	19-20	*;** (E)
3068	0-1	4-5	--	--	--	*
3069	0-1	4-5	9-10	14-15	--	*
3070	0-1	4-5	--	--	--	*
3071	0-1	4-5	--	--	--	*
3072	0-1	4-5	--	--	--	*
3073	0-1	4-5	--	--	--	*
3074	0-1	4-5	--	--	--	*
3075	0-1	4-5	--	--	--	*
3076	0-1	4-5	--	--	--	*
3077	0-1	4-5	--	--	--	*
3078	0-1	4-5	--	--	--	*
3079	0-1	4-5	--	--	--	*
3080	0-1	4-5	9-10	14-15	--	*;** (C,D)
3081	0-1	4-5	--	--	--	*
3082	0-1	4-5	--	--	--	*
3083	0-1	4-5	9-10	14-15	19-20	*;** (E)
3084	0-1	4-5	9-10	14-15	--	*;** (C,D)
3085	0-1	4-5	--	--	--	*
3086	0-1	4-5	2-3(Y)	--	--	*
3087	0-1	4-5	--	--	--	*

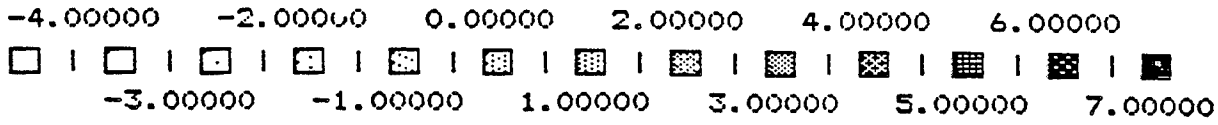
Table 36-17-1. Sampling Intervals and Analytical Parameters for Source 36-17 (Continued, Page 2 of 2)

Bore Number	Sample Interval (ft) A	B	C	D	E	Analytical Parameters
3088	0-1	4-5	--	--	--	*
3089	0-1	4-5	--	--	--	*
3091	0-1	4-5	--	--	--	*
3095	0-1	4-5	--	--	--	*
3096	0-1	4-5	--	--	--	*;** (B)
3097	0-1	4-5	--	--	--	*
3098	0-1	4-5	--	--	--	*
3099	0-1	4-5	--	--	--	*
3100	0-1	4-5	--	--	--	*
3101	0-1	4-5	--	--	--	*
3102	0-1	4-5	--	--	--	*
3103	0-1	4-5	--	--	--	*
3104	0-1	4-5	--	--	--	*

* Semi-volatile organics, DBCP, ICP Metals, Arsenic, Mercury (in all intervals).

** Volatile Organics (in Intervals Indicated Only).





EXPLANATION

Original Boring Location

Final Boring Location

Figure 36-17-4
CONTOUR PLOT OF VERTICAL MAGNETIC GRADIENT BORING 3065

SOURCE: HLA, 1986

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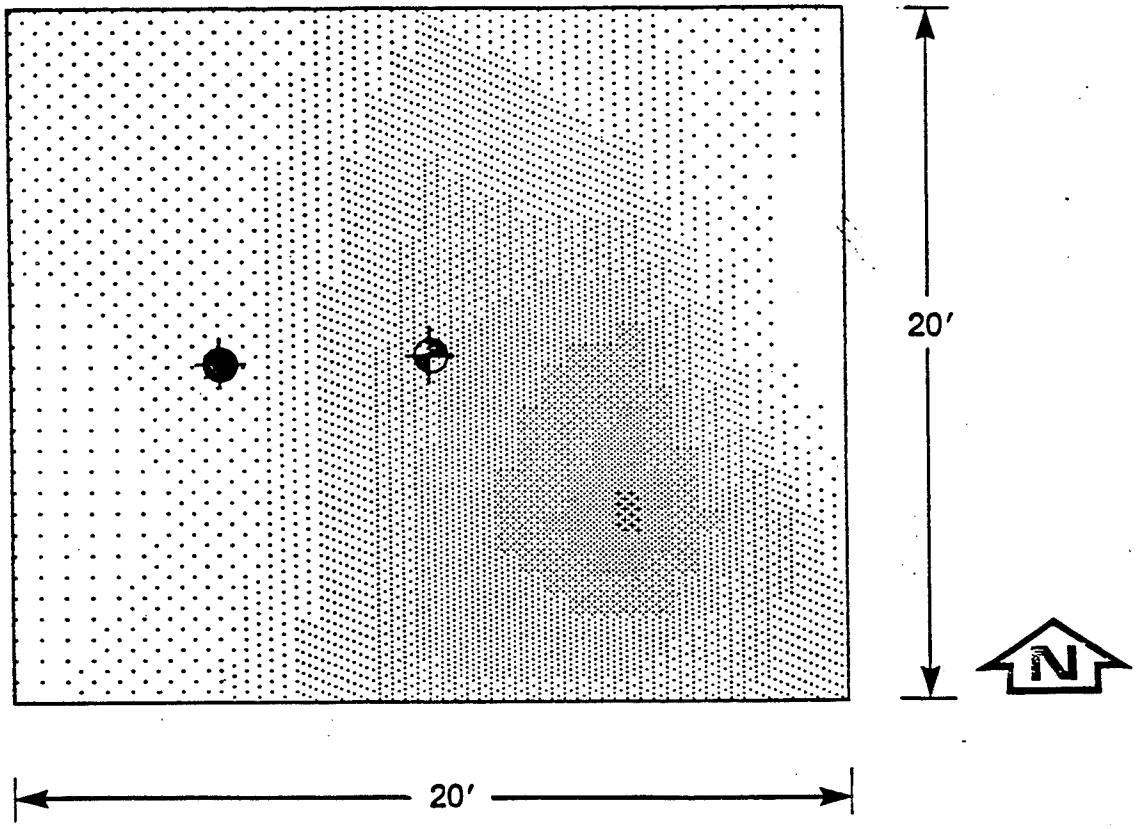
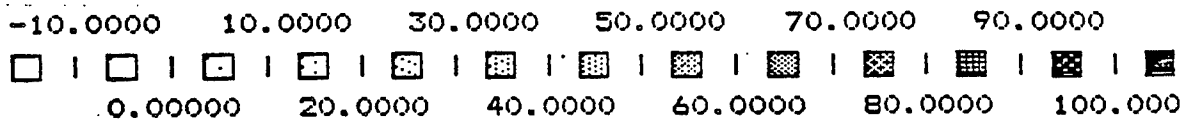
Aberdeen Proving Ground, Maryland





EXPLANATION

Original Boring Location

Final Boring Location

Figure 36-17-5
CONTOUR PLOT OF VERTICAL MAGNETIC GRADIENT BORING 3070

SOURCE: HLA, 1986

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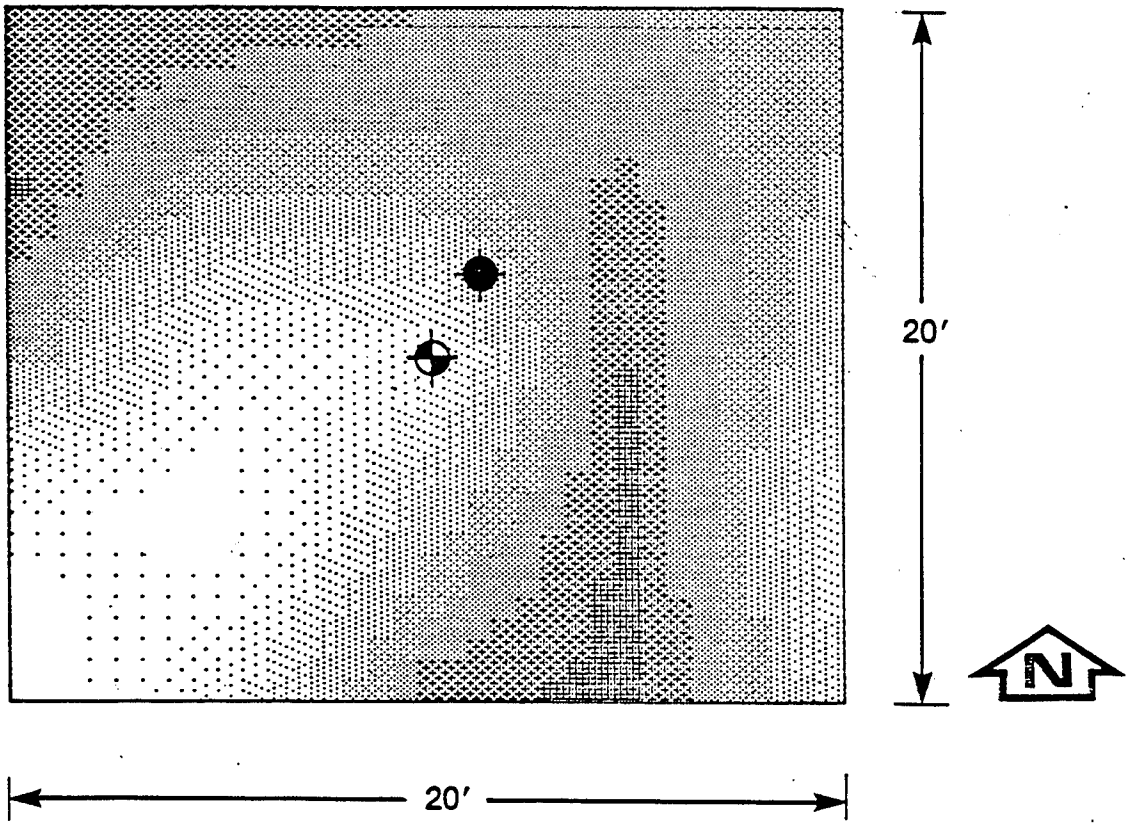
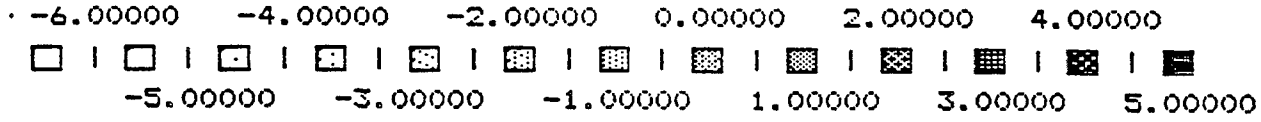
Aberdeen Proving Ground, Maryland





EXPLANATION

Original Boring Location

Final Boring Location

Figure 36-17-6
CONTOUR PLOT OF VERTICAL MAGNETIC GRADIENT BORING 3075

SOURCE: HLA, 1986

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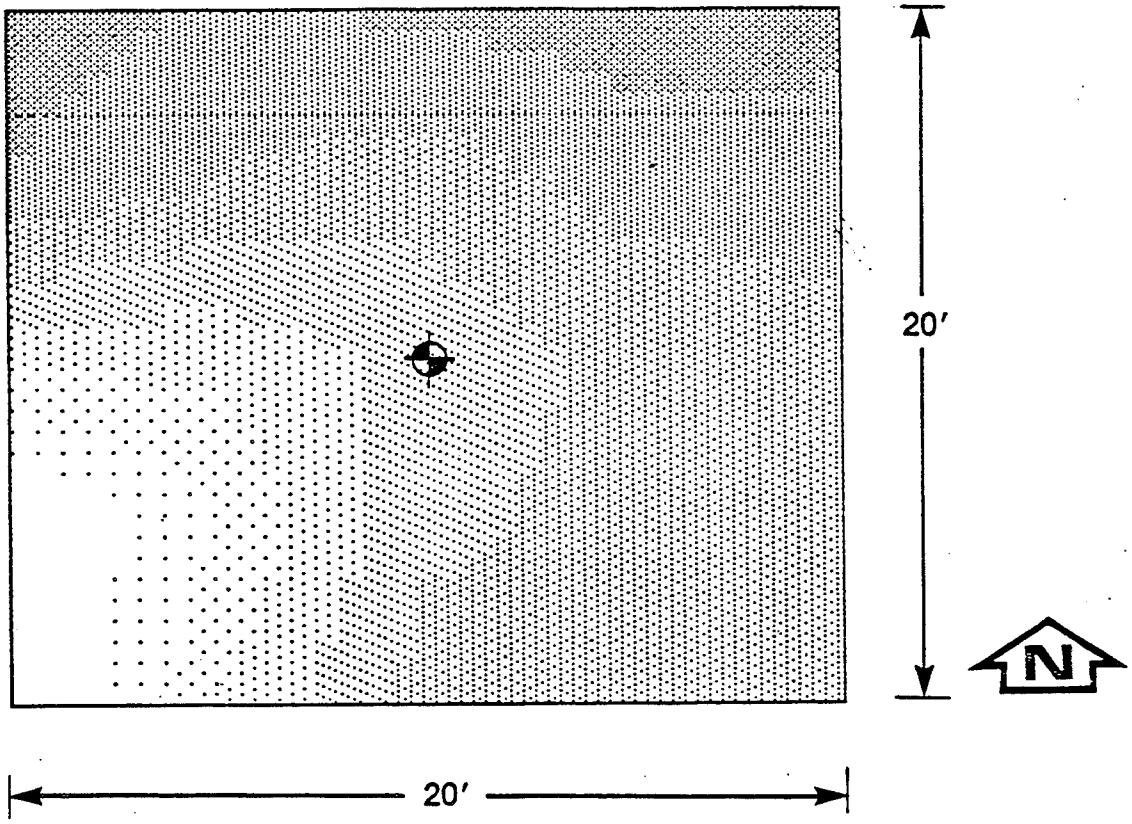

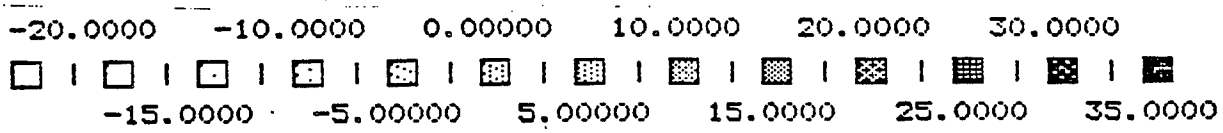

EXPLANATION

Original Boring Location

Final Boring Location

Figure 36-17-7
CONTOUR PLOT OF VERTICAL MAGNETIC GRADIENT BORING 3083

SOURCE: HLA, 1986

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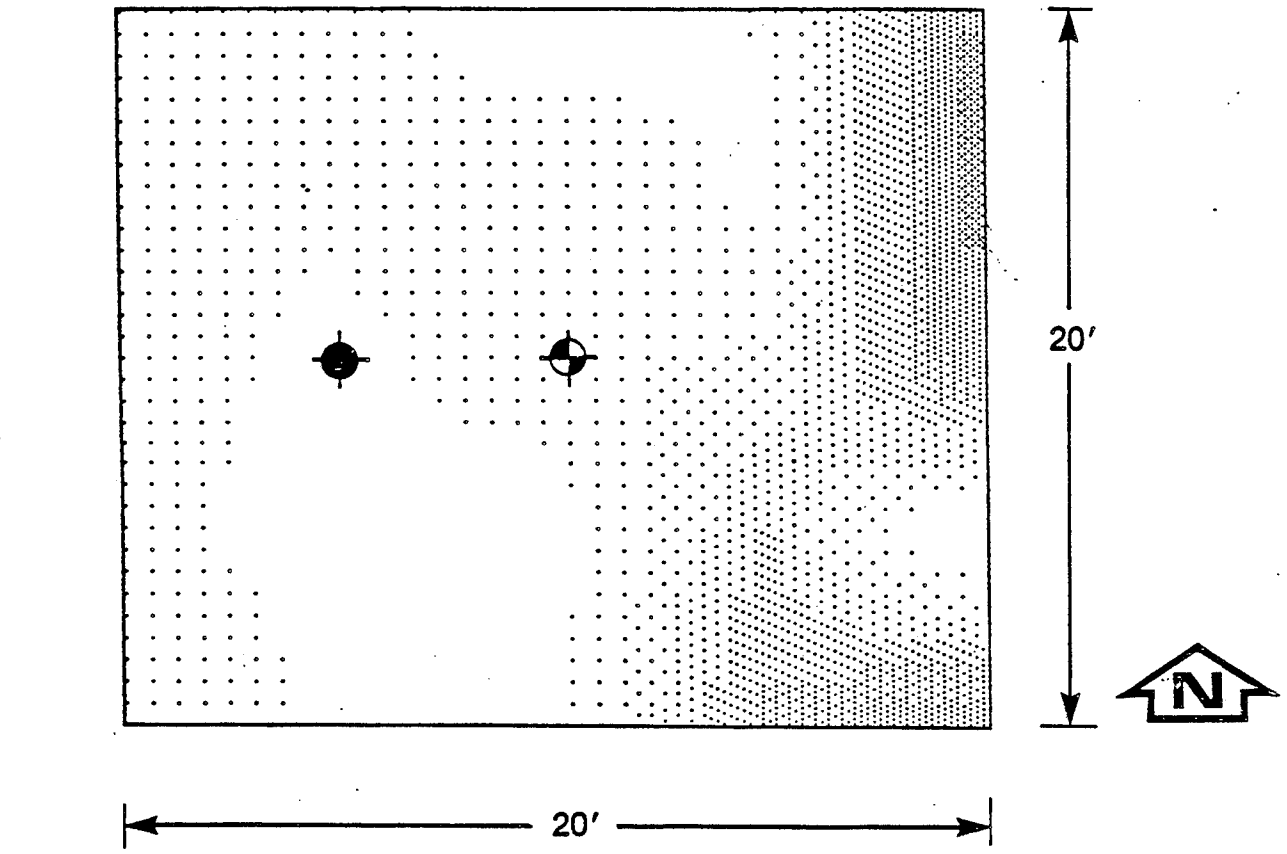
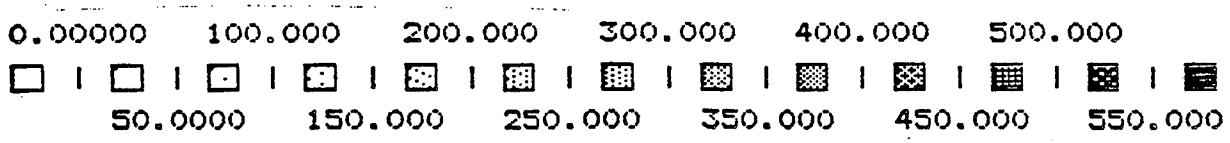
Aberdeen Proving Ground, Maryland





EXPLANATION

Original Boring Location

Final Boring Location

Figure 36-17-8
CONTOUR PLOT OF VERTICAL MAGNETIC GRADIENT BORING 3086

SOURCE: HLA, 1986

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U.S. Army Program Manager's Office For Rocky Mountain Arsenal

Aberdeen Proving Ground, Maryland

deemed a more cost and time effective method of locating areas to be further investigated for the Phase II boring program.

The Phase I geophysical investigation was performed over a 500 ft by 200 ft area located at the northern boundary of Source 36-17N. Historical aerial photography indicates that this area was used extensively for disposal activities.

The Phase I geophysical program employed two of the methods used in the Source 36-3 geophysical program. These methods were Electromagnetics (EM) and Vertical Electrical Soundings (VES). Upon consideration of the results of the Source 36-3 investigation and time constraints, it was decided that a magnetometer survey would not be conducted at this time.

EM data was collected along transects spaced at 5 ft intervals throughout the study area. Strip chart recorders were utilized to provide continuous data along each transect. Data was compiled and input into an IBM-PC which generated contour plots of the EM in-phase component (sensitive to ferrous and non-ferrous metal).

A total of four VES soundings were performed within the Source 36-17N geophysical investigation area. VES soundings provide the electrical stratigraphy of the soils at the sounding location.

A detailed discussion of the geophysical methods employed and respective theory are provided in the document titled "Geophysical Investigation of Source 36-3, 36-10 and 36-17".

3.1.2.3 Phase I Field Observations

Portions of the area contained within Source 36-17 are significantly disturbed. There are distinct areas of severe vegetation stress along the boundary between Source 36-17 and Basin A. Also, there is a large barren area immediately south of Source 36-3 which contains numerous small glass bottles and broken glass. This area is surrounded by a small earthen berm approximately 1 ft high.

Trenches are still present in the north-central and southeast areas of Source 36-17N. Boring 3086 penetrated the northern trench and the southern is approximately 100 ft west of Boring 3063. Other indicators of disposal activities in this source include:

- o Large metal tanks (possibly reaction vessels) and dragline buckets are present on the surface 90 ft west of Borehole 3065;
- o A sunken concrete cistern approximately 6 ft deep near Borehole 3083;
- o A large mound of construction debris located near the Basin A boundary in the vicinity of Borehole 3230;
- o A shallow pit with metal debris is present southwest of Borehole 3084; and
- o Surface debris (broken glass, wood and metal fragments, construction debris) scattered about the area.

Air monitoring results varied significantly from Source 36-17N and 36-17S. HNU reading taken in the borehole annulus of Source 36-17N boreholes (3059-3088) ranged from 1 to 14 ppm whereas those taken from Source 36-17S boreholes (3089-3104) ranged from 60 ppm to 500 ppm. Boreholes with readings greater than 50 ppm were: 3089 (500 ppm from 0 to 1 ft, 400 ppm from 1 to 4 ft, 110 ppm from 4 to 5 ft); 3090 (400 ppm from 1 to 4 ft, 90 ppm from 4 to 5 ft); and 3099 (60 ppm from 1 to 4 ft and 4 to 5 ft). No above background readings were obtained in the breathing zone.

Field monitoring for chemical agents was negative at all locations. However, composite samples of Boreholes 3090, 3092, 3093, and 3094 sent to the RMA laboratory for agent screening were positive for mustard. These samples were delivered to RMA personnel for appropriate processing and disposal.

3.1.2.4 Phase I Contaminant Levels and Distribution

The northern portion of Source 36-17 appears to have been used almost exclusively for disposal and destruction of a variety of munitions. These munitions include bursters, bombs, bomblets, incendiary devices, WP grenades, neutralized GB, and other chemical-filled munitions. Organic

contaminants expected in this source area included mustard, GB, Lewisite, and possibly surety materials other than the more common agents. UXO was also expected in some locations.

The history of Source 36-17S is somewhat less clear. The large devegetated area south of Source 36-3 shows evidence of surface or near surface disposal of numerous small glass vials. These could have been from field identification kits or laboratory operations. The area north of Source 36-3 was reportedly used for disposal of materials generated by mustard manufacturing. Anticipated contaminants at this site were pesticides, agents, and possibly UXO.

Analytical data for the Phase I boring program have been tabulated in Appendix 36-17-B. A descriptive summary of these results is presented in Table 36-17-2. Samples containing concentrations above detection limits are tabulated in Table 36-17-3 and significant values are displayed graphically in Figure 36-17-9a and 36-17-9b.

Analysis of Source 36-17 Phase I soil samples indicated the presence of DBCP, organochlorine pesticides, and organosulfur compounds, and elevated arsenic, mercury, and metals concentrations. Organochlorine pesticides observed include aldrin, dieldrin, endrin, DIMP, chlordane, and DBCP. Concentration range from slightly greater than the associated detection limits to some very high levels in isolated areas.

All samples taken from this source were tested for presence of agents by the RMA laboratory which analyzed a composite of each days samples. If positive readings were found, individual samples from each boring were analyzed to identify location. Positive readings for mustard were found in Borings 3900, 3092, 3093, and 3094. Samples from these boring were consequently not analyzed for other constituents.

Compounds which were not part of the target list (unknowns) detected during the Phase I GC/MS analysis are included in the data file presented in Appendix 36-17-B. They are identified only as UNK123, where the three

Table 36-17-2. Summary of Analytical Results for Source 36-17 Analytical Data

Constituent	Number of Samples*	Concentrations (µg/g) Range	Mean	Median	Standard Deviation	Detection Limit (µg/g)
Volatiles						
None Detected						
Semi-Volatiles						
Aldrin	3	1->1000	300	6	600	0.9
Dieldrin	6	0.3->499	80	0.9	200	0.3
Endrin	1	0.9-0.9	--	--	--	0.7
Chlordane	2	60-70	70	70	5	1
p,p'-DDE	1	3-3	--	--	--	0.3
DIMP	5	0.7-4	2	2	2	0.5
PCPMS	1	0.7-0.7	--	--	--	0.3
DBCP	6	0.012-0.44	0.12	0.07	0.16	0.005
Metals						
Cadmium	12	0.70-13	3.3	1.0	4.1	0.9
Chromium	83	7.0-1,400	30	11	160	7.2
Copper	95	5.0-660	21	10	68	4.8
Lead	25	17-7,100	310	23	1,400	17
Zinc	88	24-12,000	200	39	1,300	16
Arsenic	23	4.7-29	10	6.5	7.1	4.7
Mercury	26	0.050-1.2	0.18	0.12	0.24	0.05

* Number of samples in which constituent was detected.

Source: ESE, 1986

Table 36-17N-3. Concentrations of Target Analytes Above Detection Limits in Source 36-17N Soil Samples (Page 1 of 6)

Bore Number	3059A	3059B	3060A	3060B	3061A	3061B	3062A	3062B	3063A	3063B	3064A	3064B	3065A
Depth (ft)	0-1	4-5	0-1	4-5	0-1	4-5	0-1	4-5	0-1	4-5	0-1	4-5	1-2
Geologic Material	Sandy Silt	Silty Sand	Slightly Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Slightly Sandy Silt	Slightly Sandy Silt	Slightly Sandy Silt	Sandy Silt	Sandy Silt
AIR MONITORING													
HNU (ppm)	BKD	BKD	BKD	1	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD
SOIL CHEMISTRY													
Volatiles (µg/g)													
None Detected													
Semi-Volatiles (µg/g)													
Chlordane	70	--	--	--	--	--	--	--	--	--	--	--	--
DIMP	--	0.9	--	--	--	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--	--	--	--	--	>1000
Dieldrin	--	--	--	--	--	--	--	--	--	--	--	--	>499
Metals (µg/g)													
Cadmium	--	--	--	--	--	--	--	--	--	--	--	2.9	--
Chromium	16	10	14	--	18	--	11	12	11	9	13	10	10
Copper	8	--	15	8	11	5	14	11	20	9	11	8	11
Lead	27	--	--	--	29	--	--	--	--	--	--	--	--
Zinc	57	32	39	37	70	26	--	37	64	--	35	--	--
Arsenic	7.9	--	--	--	6.7	--	--	--	--	--	--	--	--
Mercury	0.15	--	--	--	--	--	--	--	--	--	0.17	0.11	0.12

Table 36-17N-3. Concentrations of Target Analytes Above Detection Limits in Source 36-17N Soil Samples (Continued, Page 2 of 6)

Bore Number	3065B	3065C	3065Z	3066A	3066B	3067A	3067B	3067C	3067D	3067E	3068A	3068B	3069A
Depth (ft)	4-5	9-10	12-13	0-1	4-5	0-1	4-5	9-10	14-15	19-20	0-1	4-5	0-1
Geologic Material	Silty Sand	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Silty Claystone	Silty Claystone	Slightly Sandy Silt	Slightly Sandy Silt	Sandy Silt
AIR MONITORING													
HNU (ppm)	1	1	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD
SOIL CHEMISTRY													
Volatiles (µg/g)													
None Detected													
Semi-Volatiles (µg/g)													
None Detected													
Metals (µg/g)													
Cadmium	--	--	--	--	--	--	--	0.7	0.9	1.0	--	--	--
Chromium	11	14	20	10	--	10	10	14	14	15	14	10	9
Copper	10	13	19	12	7	11	9	22	41	46	16	10	8
Lead	--	--	--	--	--	--	--	--	25	22	21	--	--
Zinc	--	37	69	--	--	34	--	51	90	86	44	32	32
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	0.17	--	0.12	--	0.09	--	--	--	--	--	--	--

Table 36-17N-3. Concentrations of Target Analytes Above Detection Limits in Source 36-17N Soil Samples (Continued, Page 3 of 6)

Bore Number	3069B	3069C	3069D	3070A	3070B	3071A	3071B	3072A	3072B	3073A	3073B	3074A	3074B
Depth (ft)	4-5	9-10	14-15	0-1	4-5	0-1	4-5	0-1	4-5	0-1	4-5	0-1	4-5
Geologic Material	Silty Sand	Silty Sand	Claystone	Silty Sand	Silty Sand	Sandy Silt	Silty Sand	Silty Sand	Silty Sand	Sandy Silt	Silty Sand	Sandy Silt	Silty Sand
AIR MONITORING													
HNU (ppm)	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD
SOIL CHEMISTRY													
Volatiles (µg/g)													
None Detected													
Semi-Volatiles (µg/g)													
Dieldrin	--	--	--	--	--	--	--	--	--	0.3	--	--	--
Metals (µg/g)													
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	9	34	--	11	8	--	14	10	12	--	15	10
Copper	5	8	25	15	9	6	5	13	9	12	13	13	10
Lead	--	--	21	--	--	--	--	--	--	33	--	--	--
Zinc	24	35	69	42	43	28	29	39	--	51	37	42	31
Arsenic	--	6.1	--	4.7	6.5	--	--	--	--	5.1	5.1	--	--
Mercury	--	--	--	--	--	--	0.06	--	--	0.08	0.05	--	--

Table 36-17N-3. Concentrations of Target Analytes Above Detection Limits in Source 36-17N Soil Samples (Continued, Page 4 of 6)

Bore Number	3075A	3075B	3076A	3076B	3077A	3077B	3078A	3078B	3079A	3079B	3080A	3080B
Depth (ft)	0-1	4-5	0-1	4-5	0-1	4-5	0-1	4-5	0-1	4-5	0-1	4-5
Geologic Material	Silty Sand	Silty Sand	Slightly Sandy Silt	Slightly Sandy Silt	Slightly Sandy Silt	Slightly Sandy Silt	Slightly Sandy Silt	Slightly Sandy Silt	Slightly Sandy Silt	Slightly Sandy Silt	Sandy Silt	Silty Sand
AIR MONITORING												
HNU (ppm)	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	2.6	2.6
SOIL CHEMISTRY												
Volatiles (µg/g)												
None Detected												
Semi-Volatiles (µg/g)												
Dieldrin	--	--	3	--	1	--	--	--	--	--	--	--
Endrin	--	--	0.9	--	--	--	--	--	--	--	--	--
DIMP	--	--	--	2	--	--	--	4	--	--	--	--
Metals (µg/g)												
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	7	8	12	10	9	8	--	8	10	9	--	--
Copper	6	8	30	8	10	6	6	6	8	7	6	6
Lead	--	--	30	--	23	--	--	--	18	--	--	--
Zinc	30	39	60	44	41	32	26	35	38	38	34	30
Arsenic	--	--	27	--	11	11	8.9	--	5.0	--	--	--
Mercury	--	0.07	0.59	0.07	0.20	--	--	--	--	0.23	--	--

Table 36-17N-3. Concentrations of Target Analytes Above Detection Limits in Source 36-17N Soil Samples (Continued, Page 5 of 6)

Bore Number	3080C	3080D	3081A	3081B	3082A	3082B	3083A	3083B	3083C	3083D	3083E	3084A	3084B
Depth (ft)	9-10	14-15	0-1	4-5	0-1	4-5	0-1	4-5	9-10	14-15	19-20	0-1	4-5
Geologic Material	Silty Sand	Claystone	Sandy Silt	Silty Sand	Sandy Silt	Silty Sand	Silty Sand	Silty Sand	Silty Sand	Sandy Clayey Silt	Sandy Clay	Sandy Silt	Sandy Silt
AIR MONITORING													
HNU (ppm)	BKD	BKD	14	12	1	1.2	BKD	BKD	BKD	BKD	BKD	BKD	BKD
SOIL CHEMISTRY													
Volatiles (µg/g)													
None Detected													
Semi-Volatiles (µg/g)													
DDE	--	--	--	--	--	--	3	--	--	--	--	--	--
Metals (µg/g)													
Cadmium	1.0	--	--	--	--	--	6.9	--	--	--	--	--	--
Chromium	9	--	14	13	--	12	16	14	14	15	12	8	9
Copper	9	36	15	12	5	8	14	13	15	15	22	5	5
Lead	--	18	19	--	--	17	20	--	--	--	--	--	--
Zinc	38	66	39	39	35	48	48	39	44	50	51	27	31
Arsenic	--	--	--	--	--	5.7	--	--	--	--	--	--	--
Mercury	--	0.06	--	--	--	--	0.36	--	--	--	--	--	--

Table 36-17N-3. Concentrations of Target Analytes Above Detection Limits in Source 36-17N Soil Samples (Continued, Page 6 of 6)

Bore Number	3084C	3084D	3085A	3085B	3086A	3086B	3086Y	3087A	3087B	3088A	3088B
Depth (ft)	9-10	14-15	0-1	4-5	0-1	4-5	2-2.5	0-1	4-5	0-1	4-5
Geologic Material	Sandy Silt	Saturated Silty Sand	Slightly Clayey Silt	Sandy Silt	Silty Sand	Silty Sand	Silty Sand	Silty Sand	Silty Sand	Silty Sand	Silty Sand
AIR MONITORING											
HNU (ppm)	BKD	BKD	BKD	BKD	50-100	BKD	BKD	1.2	BKD	BKD	BKD
SOIL CHEMISTRY											
Volatiles (µg/g)											
None Detected											
Semi-Volatiles (µg/g)											
DBCP	--	--	--	--	0.012	0.14	0.11	--	--	--	--
Metals (µg/g)											
Cadmium	--	--	--	--	1.8	13	9.6	--	--	--	--
Chromium	9	--	14	8	15	33	1400	--	8	8	8
Copper	6	5	17	5	27	170	660	6	--	6	5
Lead	--	--	32	--	96	150	7100	--	--	--	--
Zinc	34	36	65	29	112	2500	12,000	27	28	30	31
Arsenic	--	--	7.8	--	--	--	--	--	--	--	--
Mercury	--	--	0.06	--	0.13	1.2	--	--	--	--	--

BKD No readings above ambient background.
-- Below detection limit.

Table 36-17S-3. Concentrations of Target Analytes Above Detection Limits in Source 36-17S Soil Samples (Page 1 of 2)

Bore Number Depth (ft) Geologic Material	3089A 0-1 Slightly Sandy Silt	3089B 4-5 Sandy Silt	3091A 0-1 Sandy Silt	3091B 4-5 Clayey Silt	3095A 0-1 Slightly Silty Sand	3095B 4-5 Slightly Silty Sand	3096A 0-1 Clayey Silt	3096B 4-5 Clayey Silt	3097A 0-1 Silty Sand	3097B 4-5 Saturated Sandy Silt	3098A 0-1 Sandy Silt	3098B 4-5 Silty Sand
AIR MONITORING												
HNU (ppm)	500	400	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD
SOIL CHEMISTRY												
Volatiles (µg/g)												
None Detected												
Semi-Volatiles (µg/g)												
Dieldrin	0.7	--	--	--	--	--	--	--	--	0.6	--	--
Chlordane	60	--	--	--	--	--	--	--	--	--	--	--
DIMP	--	0.7	--	--	--	--	--	--	4	--	--	--
DBCP	--	--	--	0.031	--	--	--	--	--	--	--	0.013
Aldrin	--	--	--	--	--	--	--	--	--	1	--	--
PCPMS	--	--	--	--	--	--	--	--	--	--	--	--
Metals (µg/g)												
Cadmium	--	--	--	--	0.7	--	--	0.8	--	--	--	--
Chromium	11	14	12	11	15	11	16	18	7	--	10	22
Copper	7	9	8	7	17	13	22	17	7	--	7	8
Lead	--	19	25	--	20	--	--	--	25	--	18	--
Zinc	48	46	44	39	52	41	71	45	62	34	37	43
Arsenic	16	--	--	4.9	21	--	--	29	6.2	--	5.1	5.4
Mercury	0.20	--	0.06	--	0.09	--	--	--	0.13	--	0.07	--

Table 36-17S-3. Concentrations of Target Analytes Above Detection Limits in Source 36-17S Soil Samples (Continued, Page 2 of 2)

Bore Number	3099A	3099B	3100A	3100B	3111A	3101B	3102A	3102B	3103A	3103B	3104A	3104B
Depth (ft)	0-1	4-5	0-1	4-5	0-1	4-5	0-1	4-5	0-1	4-5	0-1	4-5
Geologic Material	Clayey Silt	Saturated Clayey Silt	Silty Sand	Silty Sand	Clayey Silt	Clayey Silt	Silty Sand	Clayey Sand	Sandy Silt	Silty Sand	Sandy Silt	Silty Sand
AIR MONITORING												
HNU (ppm)	60	90	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD	BKD
SOIL CHEMISTRY												
Volatiles (µg/g)												
None Detected												
Semi-Volatiles (µg/g)												
Dieldrin	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	--	--	--	--	--	--	--	--	--	--	--	--
DIMP	--	--	--	--	--	--	--	--	--	--	--	--
DBCP	--	0.44	--	--	--	--	--	--	--	--	--	--
Aldrin	--	6	--	--	--	--	--	--	--	--	--	--
PCPMS	--	0.7	--	--	--	--	--	--	--	--	--	--
Metals (µg/g)												
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	14	10	17	16	18	--	9	11	16	15	21	11
Copper	9	7	16	15	10	--	13	11	15	14	17	12
Lead	22	--	--	--	26	--	--	--	--	--	--	--
Zinc	47	36	52	45	60	24	39	--	44	41	59	--
Arsenic	4.8	--	--	--	6.9	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	0.16	--	--

BKD No readings above ambient background.
-- Below detection limit.

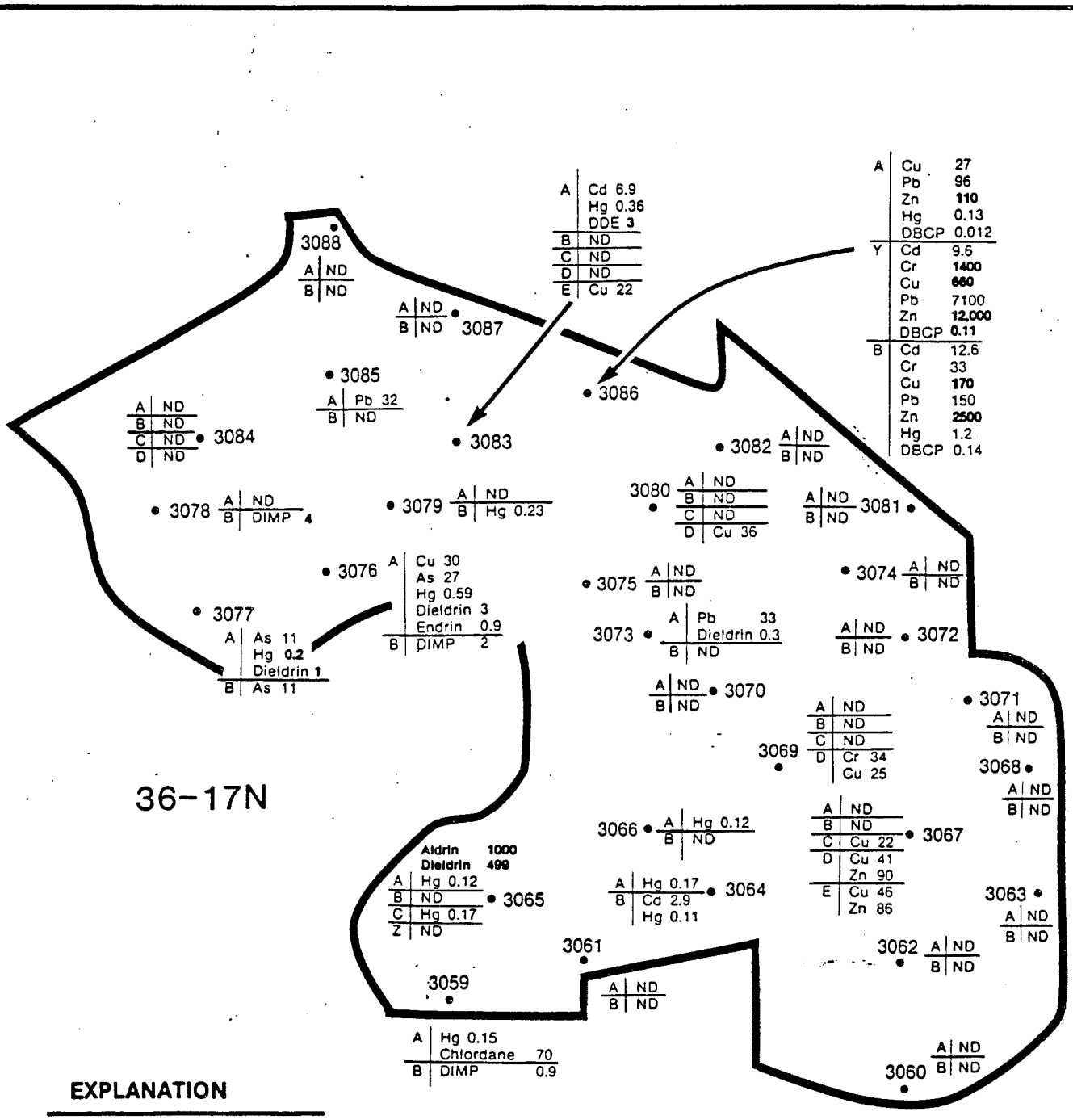


Figure 36-17-9a
SOURCE 36-17S
PHASE I CHEMICAL ANALYSIS
SOURCE: ESE, 1986

Prepared for:
U.S. Army Program Manager's Office
For Rocky Mountain Arsenal
Aberdeen Proving Ground, Maryland

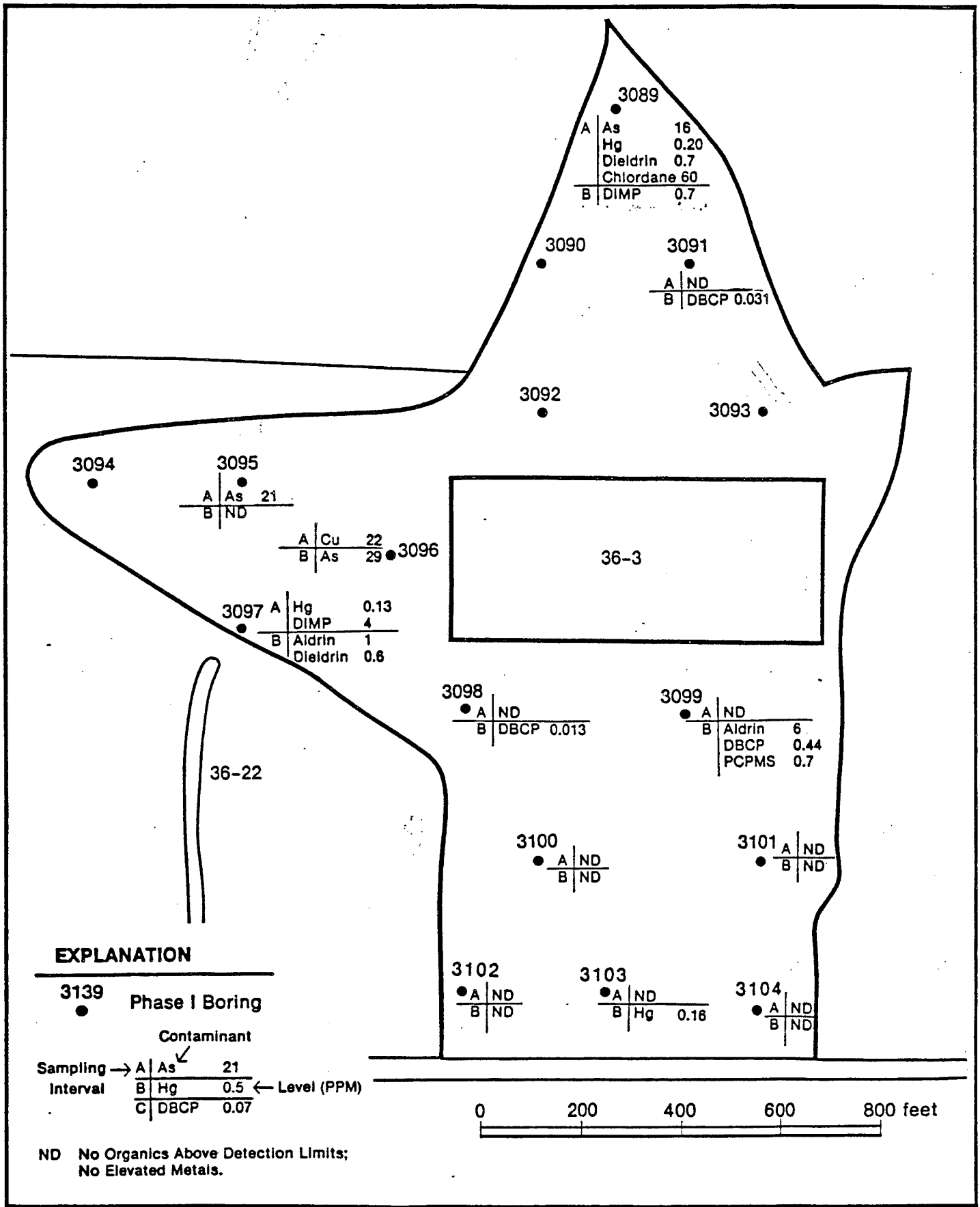


Figure 36-17-9b
SOURCE 36-17S
PHASE I CHEMICAL ANALYSIS
SOURCE: ESE, 1986

Prepared for:
U.S. Army Program Manager's Office
For Rocky Mountain Arsenal
Aberdeen Proving Ground, Maryland

digit number is relative retention time. Library searches were run against the unknowns, and an attempt at positive identification was made as summarized in Table 36-17-4.

3.1.2.4 Phase I Contamination Assessment

The pattern of contamination observed at Source 36-17N is generally consistent with the reported history as a trench disposal area. Many of the Phase I borings encountered little or no evidence of contamination. All borings east of a line between 3073 and 3066 were free of significant contamination. This could indicate the area was not used for trench disposal. However, the data for 3086 and surrounding areas indicates this conclusion would be premature. Boring 3186 exhibited visual staining in the column, and the chemical results show the highest levels of metals found in Section 36, in addition to some DBCP. The surrounding holes exhibit little evidence of contamination. This pattern illustrates that contamination within Source 36-17 is severe in isolated areas, but large portions of the area are probably uncontaminated.

The deeper intervals of Borings 3067 and 3069 exhibit Cr, Cu, and Zn concentrations slightly above those seen elsewhere. These levels are within the indicator ranges used as representative of natural variations. This is regarded as indicative of the phenomenon discussed in the Executive Summary of elevated metals levels in shales. These deeper borings penetrated the Denver Formation, which has exhibited similar metals levels in other sources (Source 36-12).

The portion of Source 36-17N adjacent to Basin A exhibits a pattern of pesticide contamination not seen in the remainder of the area. Pesticides including dieldrin, endrin, and DIMP are prevalent in Borings 3077 and 3076, as they are in the adjacent Boring 3233 in Basin A. This would suggest a particular source of contamination in this area. DIMP is not commonly found elsewhere in Basin A or Source 36-17N.

Table 36-17-4. Tentative Identification of Non-Target Compounds in Source 36-17. (Page 1 of 9)

Borehole Number	Interval Depth (ft)	Unknown Number	Concentration (ppm)	Sample Number	Lot	Best Fit*	Phase II Analysis Required	Comments*
3059	0-1	609	0.9	505600	BIB	No match found	N	No positive identification
		611	5			No good library match found	N	No positive identification
		612	0.7			No good library match found	N	No positive identification
		614	2			No good library match found	N	No positive identification
		619	0.6			B-p-Ts coelecite		
3059	4-5	523	0.4	505601	BIB		N	In blank
		634	0.3			Phthalate	N	Plasticizer
		637	0.7			Phthalate	N	Plasticizer
		654	0.4			Phthalate	N	Plasticizer
3060	0-1	608	0.3	505606	MEK	Hexadecanoic acid	N	Naturally occurring
		615	1			Alkene hydrocarbon	N	Oil
3060	4-5	614	1	505607	MEK	Dibutyl nonanoate	N	Naturally occurring
3061	0-1	523	0.3	505612	BIB		N	In blank
		614	0.9			Octadecenol	N	In blank
		631	0.4			Octadecenal	N	By-product
		633	0.4			Phthalate	N	Plasticizer
		636	0.7			Diheptyl phthalate	N	Plasticizer
3061	4-5	523	0.3	505613	BIB		N	In blank
		634	0.4			Phthalate	N	Plasticizer
		637	0.9			Phthalate	N	Plasticizer
		641	0.3			Phthalate	N	Plasticizer
		654	0.4			Phthalate	N	Plasticizer
3062	0-1	542	1	505618	MEJ	1,3 Butanediol		
		579	0.4			Isobutyl butenedioate	N	Naturally occurring
		609	1			Hexadecanoic acid	N	Naturally occurring
		633	0.5			Hydrocarbon unknown	N	Oil, No positive identification
		634	0.3			Unknown hydrocarbon	N	Oil, No positive identification
3062	4-5	542	1	505619	MEJ	1,3 butanediol		
		544	0.3			Unknown	N	No positive identification
		579	2			Isobutyl butenedioate	N	Naturally occurring
		609	3			Hexadecanoic acid	N	Naturally occurring
		633	2			Alkene hydrocarbon C_{18} or higher	N	Oil, No positive identification
3063	0-1	608	0.3	505624	MEK	Hexadecanoic acid	N	Naturally occurring
		633	0.6			Alkene hydrocarbon	N	Oil, No positive identification

Table 36-17-4. Tentative Identification of Non-Target Compounds in Source 36-17. (Continued, Page 2 of 9)

Borehole Number	Interval Depth (ft)	Unknown Number	Concentration (ppm)	Sample Number	Lot	Best Fit*	Phase II Analysis Required	Comments*
3063	4-5	614	0.8	505625	MEK	Dibutyl nonanoate	N	Naturally occurring
		635	2			Bis (2-ethyl hexyl) Phthalate	N	Plasticizer
3064	0-1	542	0.3	505630	MEJ	1,3, butanediol		
		579	0.3			Isobutyl butenedioate	N	Naturally occurring
		609	0.3			Hexadecanoic acid	N	Naturally occurring
		629	2			Dioctyl adipate	N	Naturally occurring
3064	4-5	542	0.9	505631	MEJ	1,3 butanediol		
		579	0.4			Isobutyl butenediate	N	Naturally occurring
		609	0.5			Hexadecanoic acid	N	Naturally occurring
		633	0.3			Alkene hydrocarbon	N	Oil, No positive identification
3065	0-1	596	20	505636	MEJ	Pentachlorooctahydromethano-cyclopropapentalene		
		601	20			Chlorinated unknown		
		604	20			Unknown		
		606	20			Chlorinated unknown		
		612	10			Unknown		
		613	20			Chlorinated unknown		
		617	40			Chlorinated unknown		
		621	100			Chlorinated unknown		
		622	20			Unknown		
		633	10			Chlorinated unknown		
3065	4-5	542	2	505637	MEJ	1,3 butanediol		
		579	0.5			Isobutyl butenedioate	N	Naturally occurring
		604	1			Unknown	N	No positive identification
		621	0.5			Unknown organophosphate		
		629	3			Dioctyladipate	N	Naturally occurring
3065	9-10	542	2	505638	MEJ	1,3 butanediol		
		579	0.5			Isobutyl butenedioate	N	Naturally occurring
		609	0.4			Hexadecanoic acid	N	Naturally occurring
		632	0.4			Alkene hydrocarbon	N	Oil, No positive identification
3065	12-13	614	0.5	505672	MEK	Dibutyl nonanoate	N	Naturally occurring
		629	1			Dioctyl adipate	N	Naturally occurring
3066	0-1	542	0.9	505642	MEJ	1,3 butanediol		
		579	0.5			Isobutyl butenedioate	N	Naturally occurring
		633	0.3			Alkyl hydrocarbon	N	Oil, No positive identification

Table 36-17-4. Tentative Identification of Non-Target Compounds in Source 36-17 (Continued, Page 3 of 9)

Borehole Number	Interval Depth (ft)	Unknown Number	Concentration (ppm)	Sample Number	Lot	Best Fit*	Phase II Analysis Required	Comments*
3066	4-5	542	1	505643	MEJ	1,3 butanediol		
		579	1			Isobutyl butenedioate	N	Naturally occurring
		609	0.3			Hexadecanoic acid	N	Naturally occurring
		633	1			Alkyl hydrocarbon	N	Oil, No positive identification
3067	0-1	542	2	505648	MEJ	1,3 butanediol		
		579	0.5			Isobutyl butenediol	N	Naturally occurring
		609	0.4			Hexodecanoic acid	N	Naturally occurring
		633	0.7			Alkyl hydrocarbon	N	Oil, No positive identification
3067	4-5	542	1	505649	MEJ	1,3 butanediol		
		579	0.5			Isobutyl butenedioate	N	Naturally occurring
		609	0.3			Hexadetanoic acid	N	Naturally occurring
		633	0.6			Alkyl hydrocarbon	N	Oil, No positive identification
3067	9-10	602	0.6	505650	MEK	Unknown	N	No positive identification
		608	0.6			Hexadecanoic acid	N	Naturally occurring
		614	6			Dibutyl nonenoate	N	Naturally occurring
		633	0.8			Alkene hydrocarbon	N	Oil, No positive identification
		635	1			Bis (2-ethyl hexyl) Phthalate	N	Plasticizer
3067	14-15			505651			N	None detected
3067	19-20	614	0.8	505652	MEK	Dibutyl nonanoate	N	Naturally occurring
		633	0.5			Alkene hydrocarbon	N	Oil, No positive identification
3068	0-1	579	0.2	505654	MEK	Diisobutyl butenoate	N	Naturally occurring
		608	0.3			Hexadecanoic acid	N	Naturally occurring
3068	4-5	614	0.5	505655	MEK	Dibutyl nonanoate	N	Naturally occurring
		635	0.6			Bis (2 ethyl hexyl) Phthalate	N	Plasticizer
3069	0-1	530	5	505660	BIC	Tetrachloroethane	N	Lab contaminant
		542	1			No good library match	N	No positive identification
		554	1			No good library match	N	No positive identification
		555	9			No match found	N	No positive identification
3069	4-5	614	6	505661	BIC	Octadecenyloxy ethanol	N	In blank
		614	2			Octadecenol	N	In blank
3069	9-10	530	2	505662		Tetrachloroethane	N	Lab contaminant
		555	3			No library match found	N	No positive identification
		614	2				N	In blank

Table 36-17-4. Tentative Identification of Non-Target Compounds in Source 36-17. (Continued, Page 4 of 9)

Borehole Number	Interval Depth (ft)	Unknown Number	Concentration (ppm)	Sample Number	Lot	Best Fit*	Phase II Analysis Required	Comments*
3069	14-15	544	1	505663	BIC	1,3-dichlorobenzene-d4	N	Surrogate
		614	2				N	In blank
3070	0-1	614	2	505666			N	In blank
3070	4-5			505667			N	None detected
3071	0-1	513	0.8	505700	BIC	Trichloroethane (1,1,2)	N	Lab contaminant
		530	6			Tetrachloroethane	N	Lab contaminant
		555	10			No library match found	N	No positive identification
		614	14				N	In blank
3071	4-5	614	2.0	505701	BIC	Dibutyl nonanedioate	N	Naturally occurring
3072	0-1	633	0.4	505706	MEL	Alkyl hydrocarbon	N	Oil, No positive identification
		635	0.9			Bis (2-ethyl hexyl) Phthalate	N	Plasticizer
3072	4-5	631	0.6	505707	MEL	Dioctyl adipate	N	Naturally occurring
3073	0-1	567	0.9	505712	BID	Tetradecane	N	Hydrocarbon aliphatic
		575	1			Heptadecane	N	Hydrocarbon aliphatic
		614	1				N	In blank
		618	1			Octadecenoic acid	N	Naturally occurring
		619	3.0			Octadecanoic acid	N	Naturally occurring
3073	4-5	523	2	505713	BID		N	In blank
3074	0-1	542	0.2	505718	MEL	1,3 butanediol		
		629	2			Dioctyl adipate	N	Naturally Occurring
		635	0.3			Bis (2 ethyl-hexyl) phthalate	N	Plasticizer
3074	4-5	635	0.7	505719	MEL	Bis (2 ethyl hexyl) phthalate	N	Plasticizer
3075	0-1	523	1	505724	BID		N	In blank
3075	4-5			505725			N	None detected
3076	0-1			505730			N	None detected
3076	4-5			505731			N	None detected
3077	0-1	614	4	505736	BIE	Dibutyl nonanedioate	N	Naturally occurring
3077	4-5		1	505737			N	None detected
3078	0-1	614	1	505742	BID	Dibutyl nonanedioate	N	Naturally occurring

Table 36-17-4. Tentative Identification of Non-Target Compounds in Source 36-17. (Continued, Page 5 of 9)

Borehole Number	Interval Depth (ft)	Unknown Number	Concentration (ppm)	Sample Number	Lot	Best Fit*	Phase II Analysis Required	Comments*
3078	4-5	637	8	505743	BID	Bis (2-ethyl hexyl) phthalate	N	Plasticizer
3079	0-1	538	1	505748	BIE	Dimethoxymethane		Solvent
3079	4-5			505749			N	None detected
3080	0-1	614	3.0	505754	BIC		N	In blank
3080	4-5			505755			N	None detected
3080	9-10			505756			N	None detected
3080	14-15	614	3	505757	BIC		N	In blank
3081	0-1	633	0.3	505760	MEL	Alkene	N	Oil, No positive identification
		635	0.4			Bis (2-ethyl hexyl) pthalate	N	Plasticizer
3082	0-1	609	1	505766	BIC	Dibutyl phthalate	N	Plasticizer
		614	10				N	In blank
		614	4			Octadecenol		
3082	4-5	614	20	505767	BIC		N	In blank
		614	5			Octadecenol		In blank
3083	0-1	576	1	505800	MEL	Hydrocarbon C_{14}	N	Oil, No positive identification
		580	0.9			Hydrobarbon	N	Oil, No positive identification
		582	1			Hydrocarbon	N	Oil, No positive identification
		620	3			$C_{14}H_8Cl_{14}$		Isomer of DDE
		635	1			Bis (2-ethyl hexyl) phthalate	N	Plasticizer
3083	4-5	589	8	505801	MEM	Diethyl phthalate	N	Plasticizer
		632	0.2			17-Pentatriacontene	N	Oil
		635	1			Bis (2-ethyl hexyl) phthalate	N	Plasticizer
3083	9-10	635	0.6	505802	MEM	Bis (2-ethyl hexyl) phthalate	N	Plasticizer
3083	14-15	579	0.2	505803	MEM	Isobutyl butenoate	N	Naturally occurring
		589	10			Diethyl phthalate	N	Plasticizer
		614	0.8			Dibutyl nonandioate	N	Naturally occurring
		632	0.5			Eicosene	N	Oil
		635	9			Bis (2-ethyl hexyl) Phthalate	N	Plasticizer

Table 36-17-4. Tentative Identification of Non-Target Compounds in Source 36-17. (Continued, Page 6 of 9)

Borehole Number	Interval Depth (ft)	Unknown Number	Concentration (ppm)	Sample Number	Lot	Best Fit*	Phase II Analysis Required	Comments*
3083	19-20	614	0.4	505804	MEM	Dibutyl nonandioate	N	Naturally occurring
		629	0.4			Di-n-octyl adipate	N	Naturally occurring
		632	0.4			Alkene hydrocarbon	N	Oil
		635	10			Bis (2-ethyl hexyl) phthalate	N	Plasticizer
3084	0-1			505806			N	None detected
3084	4-5	523	1	505807	BID		N	In blank
3084	9-10	513	0.9	505808	BID	Toluene		Solvent
		614	2			Dibutyl nonanedioate	N	Naturally occurring
3084	14-15	513	1	505809	BID	Toluene		Solvent
		639	5			Bis (2-ethyl hexyl) phthalate	N	Plasticizer
3085	0-1	614	2	505812	BID		N	In blank
3085	4-5			505813			N	None deteced
3086	0-1	577	2	505818	MEM	Trichloro aniline		
		578	1			Trichlorinated unknown		
		589	10			Diethyl phthalate	N	Plasticizer
		623	0.7			Chlorinated unknown		
		635	2			Bis (2-ethyl hexyl) phthalate	N	Plasticizer
3086	2-3	524	600	505872	MEM	Tetrachloroethane		Oil
		562	200			C_{13} alkane		Oil
		567	200			C_{14} alkane		Oil
		569	200			C_{13} alkane		Oil
		574	300			C_{15} alkane		Oil
		576	300			C_{14} alkane		Oil
		580	300			Unknown alkane		Oil
		582	300			C_{15} alkane		Oil
		588	400			C_{16} alkane		Oil
		591	200			Unknown alkane		Oil
		594	300			C_{17} alkane		Oil
		595	200			Unknown alkane		Oil
		600	100			Unknown alkane		Oil
3086	4-5	525	1000	505819	MEM	Tetrachloroethene		Oil
		562	90			C_{13} alkane		Oil
		567	90			Unknown alkane		Oil
		569	70			Unknown alkene		Oil
		574	100			C_{15} alkane		Oil
		576	80			C_{14} alkane		Oil
		580	100			Unknown alkane		Oil
		582	100			C_{15} alkane		Oil
		588	100			Unknown alkane + diethyl phthalate		Plasticizer

Table 36-17-4. Tentative Identification of Non-Target Compounds in Source 36-17. (Continued, Page 7 of 9)

Borehole Number	Interval Depth (ft)	Unknown Number	Concentration (ppm)	Sample Number	Lot	Best Fit*	Phase II Analysis Required	Comments*
		591	90			Unknown alkane		Oil
		594	40			C_{17} alkane		Oil
		595	100			Unknown alkane		Oil
		600	70			C_{14} alkane		Oil
		605	40			Unknown alkane		Oil
		609	30			Dibutyl phthalate		Plasticizer
		635	70			Bis (2-ethyl hexyl) phthalate		Plasticizer
3087	0-1	637	10	505824	BID	di-n-Octylphthalate-d4	N	Surrogate
3087	4-5	523	2	505825	BID		N	In blank
3088	0-1	523	2	505830	BID		N	In blank
		614	1			Methyl octyne		
3088	4-5	614	1	505831	BID		N	In blank
		638	2.0			Bis (2-ethyl hexyl) Phthalate	N	Plasticizer
3089	0-1	609	1	505836	BIB	No good library match found	N	No positive identification
		612	0.7			No good library match found	N	No positive identification
		614	1			Octadecenol	N	In blank
		615	2			No good library match found	N	No positive identification
		637	0.8			Phthalate	N	Plasticizer
3089	4-5	523	0.6	505837	BIB		N	In blank
		579	0.7			Similar to 2,7-dimethyl-3,6-dimethylene-1,7-octadiene	N	No positive identification
		585	0.6			Methyl-tricyclooctene carboxylate and Methyl benzene proponoate		
		636	0.7			Phthalate	N	Plasticizer
		660	0.4			Phthalate	N	Plasticizer
3091	0-1	523	0.3	505848	BIB		N	In blank
		532	0.3			Cyclohexenone	N	Solvent
		618	0.4			Octadecenoic acid	N	Naturally occurring
		633	0.3			Phthalate	N	Plasticizer
		636	0.6			Diheptyl phthalate	N	Plasticizer
3091	4-5	523	0.3	505849	BIB		N	In blank
		579	0.4			Similar to 2,7-dimethyl-3,6-dimethylene-1,7-octadiene	N	No positive identification
		585	0.5			Similar to UNK 579, lower intensities	N	No positive identification
		633	0.4			Phthalate	N	Plasticizer
		636	0.7			Diheptyl phthalate	N	Plasticizer

Table 36-1. Tentative Identification of Non-Target Compounds in Source 36 (Continued, Page 8 of 9)

Borehole Number	Interval Depth (ft)	Unknown Number	Concentration (ppm)	Sample Number	Lot	Best Fit*	Phase II Analysis Required	Comments*
3095	0-1	579	0.3	505900	MEN	Diisobutyl butenediote	N	Naturally occurring
		609	0.3			Hexadecanoic acid	N	Naturally occurring
		629	0.2			Dioctyl adipate	N	Naturally occurring
		633	0.3			Alkene	N	Oil, No positive identification
3095	4-5	604	1	505901	MEN	Diisobutyl phthalate	N	Plasticizer
3096	0-1	629	1	505906	MEN	Dioctyl adipate	N	Naturally occurring
3096	4-5	635	2	505907	MEN	Bis (2-ethyl hexyl) phthalate	N	Plasticizer
3097	0-1	614	1	505912	BIE	Octadecenol	N	In blank
3097	4-5	538	2	505913	BIE	Dimethoxy methane		Solvent
		610	1					
		614	1					
3098	0-1			505918			N	None detected
3098	4-5			505919			N	None detected
3099	0-1	523	0.8	505924	BIA		N	In blank
		636	1			Diheptyl phthalate	N	Plasticizer
		641	0.4			Phthalate	N	Plasticizer
		654	0.6			Phthalate	N	Plasticizer
3099	4-5	523	1	505925	BIA		N	In blank
		547	2			Alpha-methy-benzene methanol		
		547	9			1-phenyl-ethanone		
		636	1			Diheptyl phthalate	N	Plasticizer
3100	0-1	542	10	505930	MEI	1,3 butanediol		
		593	2			Methoxy unknown	N	No positive identification
		609	7			Dibutyl phthalate	N	Plasticizer
		632	2			Alkene hydrocarbon	N	Oil, No positive identification
		635	2			Bis (2-ethyl hexyl) phthalate	N	Plasticizer
3100	4-5	544	2	505931	MEI	1,3 butanediol		
		579	1			Diisobutyl butenoate	N	Naturally occurring
		608	1			Hexadecanoic acid	N	Naturally occurring
		632	5			Alkene hydrocarbon	N	Oil, No positive identification
		635	1			Bis (2-ethyl hexyl) phthalate	N	Plasticizer
3101	0-1	513	2	505936	BIA	Toluene		
		636	1			Diheptyl phthalate	N	Plasticizer

Table 4. Tentative Identification of Non-Target Compounds in Source 7. (Continued, Page 9 of 9)

Borehole Number	Interval Depth (ft)	Unknown Number	Concentration (ppm)	Sample Number	Lot	Best Fit*	Phase II Analysis Required	Comments*
		637	3			Bis (2-ethyl hexyl) phthalate	N	Plasticizer
		654	0.6			Phthalate	N	Plasticizer
3101	4-5	523	1	505937	BIA		N	In blank
		527	0.5			Cyclohexenol		Solvent
		532	0.9				N	In blank
		636	0.7			Diheptyl phthalate	N	Plasticizer
		654	0.3			Phthalate	N	Plasticizer
3102	0-1	579	0.7	505942	MEI	Diisobutyl butenoate	N	Naturally occurring
		604	3			Diisobutyl phthalate	N	Plasticizer
		609	1			Di-n-butyl phthalate	N	Plasticizer
		632	2			Alkene hydrocarbon	N	Oil, No positive identification
		635	7			Bis (2 ethyl hexyl) phthalate	N	Plasticizer
3102	4-5	542	0.4	505943	MEI	1,3 butanediol		
		579	1			Diisobutyl butenoate	N	Naturally occurring
		608	0.3			Hexadecanoic acid	N	Naturally occurring
		632	1			Alkene hydrocarbon	N	Oil, No positive identification
		635	3			Bis (2 ethyl hexyl) phthalate	N	Plasticizer
3103	0-1	546	2	505948	MEI	1,3 butanediol		
		579	0.7			Diisobutyl butenoate	N	Naturally occurring
		608	0.7			Hexadecanoic acid	N	Naturally occurring
		609	1			Dibutyl Phthalate	N	Plasticizer
		632	2			Alkene hydrocarbon	N	Oil, No positive identification
3103	4-5	542	2	505949	MEI	1,3 butanediol		
		608	0.9			Hexadecanoic acid	N	Naturally occurring
		633	1			Alkene hydrocarbon	N	Oil, No positive identification
		635	3			Bis (2-ethyl hexyl) phthalate	N	Plasticizer
		634	0.5			Unknown	N	No positive identification
3104	0-1	543	0.1	505954	MEI	1,3 butanediol		
		579	0.5			Diisobutyl butenoate	N	Naturally occurring
		608	0.8			Hexadeconaic acid	N	Naturally occurring
		632	1			Alkene hydrocarbon	N	Oil, No positive identification
		635	6			Bis (2-ethyl hexyl) phthalate	N	Plasticizer
3104	4-5	548	3	505955	MEI	1,3 butanediol		
		579	0.4			Diisobutyl butenoate	N	Naturally occurring
		608	0.8			Hexadecanoic acid	N	Naturally occurring
		632	1			B-alkene hydrocarbon	N	Oil, No positive identification
		635	0.8			Bis (2-ethyl hexyl) Phthalate	N	Plasticizer

The southwestern corner of Source 36-17N exhibits an unusual pattern, which is also found in the northern dip of Source 36-17S (Boring 3089). Very high levels of chlordane are found in this area, in addition to dieldrin, endrin, and DIMP. Historical records show Army Source 36-16 in this area, a reported munitions disposal area. This may explain the metals found in Boring 3202 in Basin A, but does not explain the pesticides. The chemical data would indicate the many trenches and pits observed in this area were likely used for pesticide disposal. The vertical stratification of this contamination would seem to indicate surface rather than trench disposal. The metals and chlordane are only found in the surface interval. However, the 4 to 5 foot samples contained DIMP and DBCP. This may be due to weathering or migration, but could also indicate a combination of disposal methods.

Most of the data in the northern half of Source 36-17S was lost due to presence of mustard in Borings 3090, 3092, 3093, and 3094. This precluded further analysis of samples from these holes. Borings 3213, 3214, and 3215, adjacent to Source 36-17S in Basin A, show DBCP and DIMP contamination. This suggests a possible link to Source 36-17, as these compounds are not found further west in Basin A.

The central portion of Source 36-17S shows some moderate levels of arsenic in addition to pesticides. The area just south of 3603 shows fairly high levels of DBCP, PCPMS, and aldrin. This would indicate that the broken vials found in this area may have contained pesticides. South of a line between borings 3100 and 3101, Source 36-17S appears uncontaminated. This is consistent with the lack of observed disturbances in this area.

The Phase I geophysical investigation of Source 36-17N was designed to provide more information as to the location, orientation, and dimensions of disposal trenchs or pits. The EM data was contoured and interpreted to define trench or pit boundaries. The positions of large negative EM anomalies or troughs were interpreted to indicate the presence of a metal bearing trench or pit.

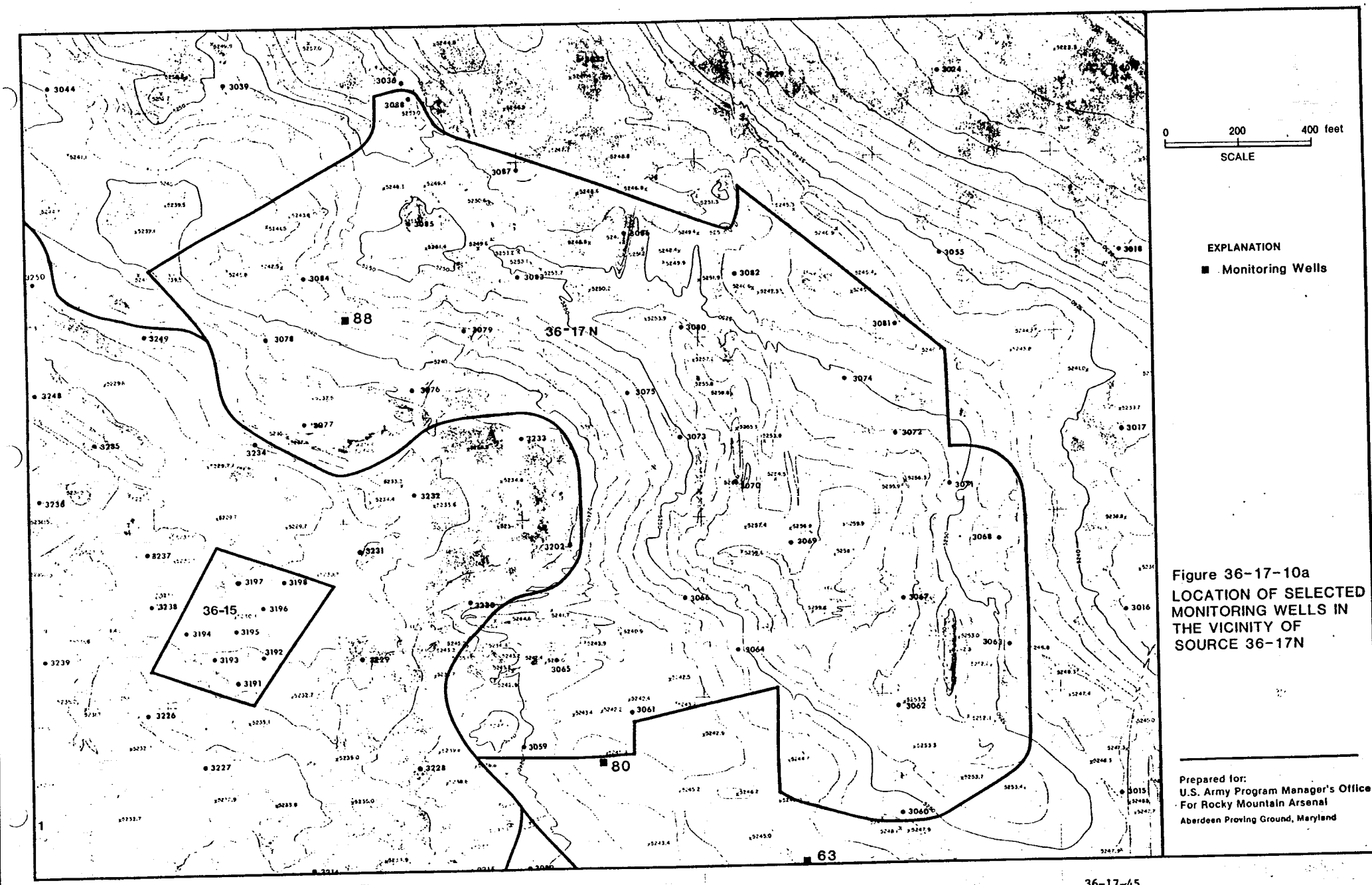
The Phase I geophysical survey resulted in the identification of four anomalies representative of disposal trenches or pits. In addition, the survey also resulted in the identification of an anomaly suggestive of a buried pipeline. Comparison of RMA Contaminant Source Maps and Plate 10 (Geophysical Investigation of Source 36-3, 36-10, and 36-17, 1986) indicates that this line is very likely the cast iron chemical pipeline originating in the North Plants and terminating at Basin A.

As no Phase I borings were constructed thru or adjacent to these anomalies the existence of these trenches and/or soil contamination has not been verified. The Phase II soil boring program will include borings in these areas to provide the requisite verifications.

Results of the VES soundings do not indicate anomalous data suggestive of grossly contaminated soils. However, they do suggest that if soil contamination does exist within the study area it is confined to an area near the existing excavation.

Ground water analytical data for the period of 1976 through 1985 were retrieved from the USATHAMA RMA data base and reviewed. The most recent analyses from each well were selected for inclusion in this report. See Figures 36-17-10a and 36-17-10b and Table 36-17-5a and 36-17-5b. In some cases, less recent data were included in order to allow comparison between two or more wells. The data have been annotated to indicate whether one or more analyses are available for each well over the period investigated, and whether target compounds were detected in determinations not included in this report. Although these data are limited in nature, they do provide additional insight regarding the interrelationship between vadose and phreatic zone contamination in the vicinity of Source 36-17.

The existing well distribution in the vicinity of Source 36-17 is suitable for an evaluation of upgradient and downgradient conditions in the alluvial aquifer, however, the parameter suits and sampling dates do not permit such an analysis in most cases. The ground water analytical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SCALE
EXPLANATION
Monitoring Wells
36-17-N
36-15
88
80
63
3044
3039
3036
3088
3087
3085
3084
3083
3082
3055
3018
3024
3029
3250
3249
3078
3079
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Figure 36-17-10a
LOCATION OF SELECTED MONITORING WELLS IN THE VICINITY OF SOURCE 36-17N
Prepared for:
U.S. Army Program Manager's Office
For Rocky Mountain Arsenal
Aberdeen Proving Ground, Maryland
36-17-45

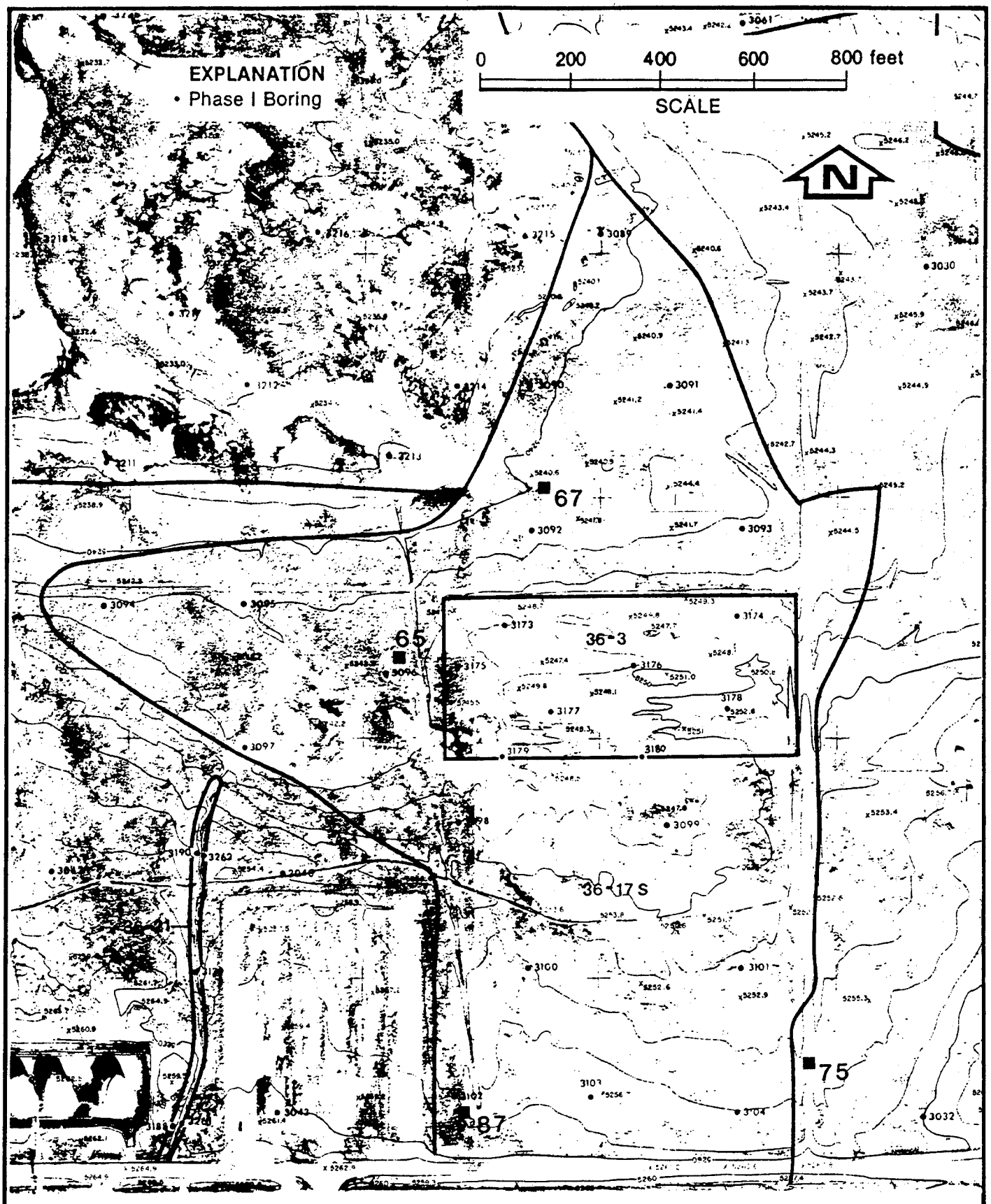


Figure 36-17-10b
LOCATION OF SELECTED MONITORING WELLS IN THE VICINITY OF SOURCE 36-17S
SOURCE: ESE, 1986

Prepared for:
U.S. Army Program Manager's Office
For Rocky Mountain Arsenal
Aberdeen Proving Ground, Maryland

Table 36-17-5a. Selected Analytical Results for Ground Water Samples Collected Near Source 36-17N (units in µg/g or ppb)

	Well Designation					
Aquifer	63 Alluvial	80 Alluvial	84 Alluvial	84 Alluvial	88 Alluvial	88 Alluvial
Date	79046[2]	79047[2]	79047[2]	83145[2]	79047[2]	83143[2]
Arsenic	<0.5	<0.5	0.015*	—	0.016*	—
Aldrin	<1.0	<1.0	<1.0*	<0.2*	<1.0	<0.2
Dieldrin	1.54	<0.5	<0.5*	<0.2*	<0.5*	<0.2*
Endrin	0.5	<0.5	<0.5*	<0.2*	<0.5*	<0.2*
Isodrin	<0.5	<0.5	<0.5*	9.42	<0.5*	0.55
DBCP	<0.4	<0.4*	<0.4*	0.23*	<0.4*	<0.2*
DCPD	<10.0	<10.0	<10.0	<1.0	<10.0	<1.0
DIMP	2.13	7540*	11590*	13900*	129.0*	223*
PCPMS	<5.0	<5.0	<5.0	—	<5.0*	—
PCPMSO	<5.0	<5.0	<5.0	<20.0	<5.0*	<20.0
$PCPMSO_2$	<5.0	30.9	129.0*	<20.0	<5.0	<20.0
Dithiane	<5.0	25.7*	450.0*	611.0*	<5.0*	1050.0*
Oxathiane	<0.5	5.65*	196.0*	—	92.9*	—
Carbon Tetrachloride	—	—	—	<1.0	—	<1.0
Chloroform	—	—	—	34.0	—	11.0
Trichloroethene	—	—	—	1089.0	—	1.0
Tetrachloroethene	—	—	—	9.0	—	<1.0
Benzene	—	—	—	16.0	—	11.0
Chlorobenzene	—	—	—	<1.0	—	<1.0
Dichlorobenzene	—	—	—	<1.0	—	<1.0
Toluene	—	—	—	<1.0	—	<1.0
Xylene	—	—	—	<0.1	—	<0.1

1 One date available.

2 Multiple dates available.

* Positive results on other date.

Table 36-17-5b. Selected Analytical Results for Ground Water Samples Collected Near Source 36-17S (units in µg/g or ppb)

	Well Designation				
Aquifer Date	65 Alluvial 79081[2]	67 Alluvial 79080[2]	75 Alluvial 79080[2]	75 Alluvial 83119[2]	87 Alluvial 79081[2]
Arsenic	<0.5	<0.5	<0.5	—	<0.5
Aldrin	<1.0	<1.0*	<1.0	<0.2	<1.0
Dieldrin	<0.5	0.79*	0.85*	0.46*	<0.5*
Endrin	<0.5	<0.5*	<0.5	<0.2	<0.5
Isodrin	<0.5	<0.5*	<0.5*	<0.2*	<0.5*
DBCP	<0.4	<0.4	<0.4*	<0.2*	<0.4*
DCPD	<10.0	<10.0*	<10.0	<1.0	<10.0
DIMP	<2.0	<2.0*	<2.0*	<10.0*	3.4*
PCPMS	<5.0	<5.0	<5.0	—	<5.0
PCPMSO	<5.0	<5.0*	<5.0	<20.0	<5.0*
$PCPMSO_2$	<5.0	<5.0*	<5.0	<20.0	13.1*
Dithiane	<5.0	<5.0*	<5.0	<20.0	<5.0
Oxathiane	<5.0	<5.0	<5.0	—	<5.0[1]
Carbon Tetrachloride	—	—	—	<1.0[1]	—
Chloroform	—	—	—	65.0[2]	—
Trichloroethene	—	—	—	<1.0[2]	—
Tetrachloroethene	—	—	—	<1.0[2]	—
Benzene	—	—	—	47.0[1]	—
Chlorobenzene	—	—	—	<1.0[1]	—
Dichlorobenzene	—	—	—	<1.0[1]	—
Toluene	—	—	—	<1.0[1]	—
Xylene	—	—	—	<0.1[1]	—

1 One date available.

2 Multiple dates available.

* Positive results on other date.

data indicate the presence of numerous contaminants in the alluvial aquifer including chlorinated pesticides, DBCP, DCPD, organosulfur compounds, aromatic solvents, halogenated aliphatic, and aromatic solvents. Although a precise determination of the source of these compounds is difficult, they are consistent with reported disposal of pesticides and herbicide process wastes and mustard in the area. Contributions of pesticide and herbicide wastes and solvents may also be derived from Source 36-3, the Shell insecticide pits.

3.1.3 Phase II Contamination Survey

3.1.3.1 Revised Phase II Program

Historical disposal activities within Source 36-17N have resulted in contamination being confined to the immediate vicinity of disposal trenches or burn pits. This resulted in Phase I chemical data which for the most part do not exceed contaminant indicator levels. The localized nature of contamination within this source area is confirmed by the soil quality data generated at Borehole 3086. Extremely elevated concentrations are present in soils contained within a former trench site, and little or no contamination is found in adjacent areas.

Based on an evaluation of Phase I analytical data, a minor modification was made to the Source 36-17N boundaries. This modification, shown in Figure 36-17-11a, is the inclusion of a small basin in the eastern portion of Basin A into the Source 36-17 area. This was based on the observation that contaminants detected in Boreholes 3233, 3202, and 3230 do not occur in adjacent portion of Basin A. Although this portion of Section 36 is a natural depression, it is at a slightly higher elevation than the main portion of Basin A. This area was also utilized for trenched disposal of materials as evidenced by interpretation of aerial photographs. Although much of the soil between Sources 36-1 and 36-17 contains contaminants which have resulted from several process boundaries of sources have been defined such that areas which deviate from recognized Basin A contaminant patterns are included within the associated portions of Source 36-17.

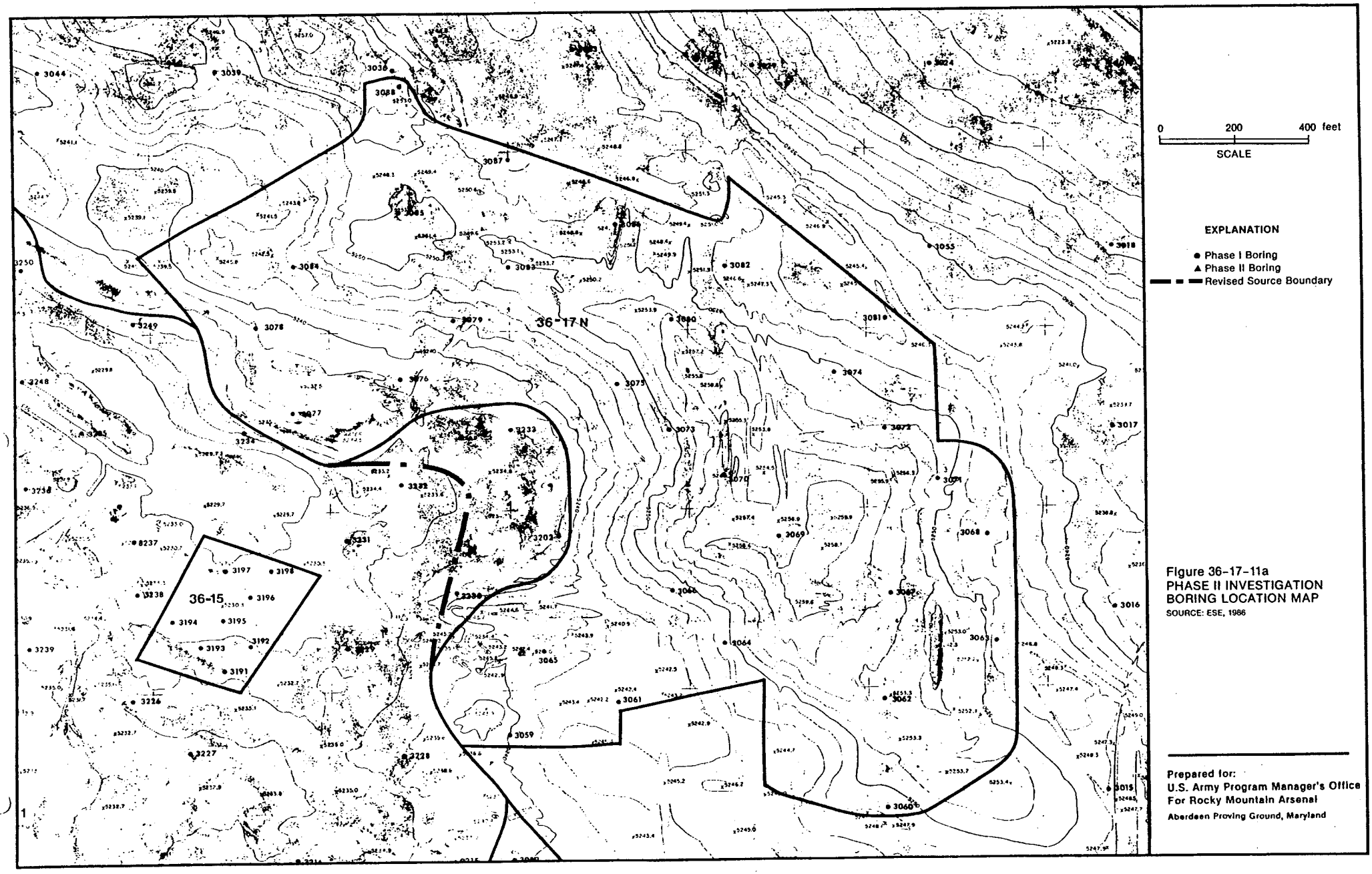


Figure 36-17-11a
PHASE II INVESTIGATION
BORING LOCATION MAP
SOURCE: ESE, 1986

Prepared for:
U.S. Army Program Manager's Office
For Rocky Mountain Arsenal
Aberdeen Proving Ground, Maryland

As contamination in Source 36-17N appears to be confined to very isolated areas, a Phase II boring program alone would provide only "hit or miss" information on the extent of contamination. It is anticipated that many of the numerous trenches observed in historical aerial photographs contain contaminated soil similar to that observed in Borehole 3086. Therefore the primary thrust of the initial Phase II program will be to use available resources to accurately locate these trenches.

Based on the success of the limited geophysical investigation of Source 36-17N, more intensive Phase II geophysical program will be implemented map areas that most likely contain disposal trenches. The Phase II geophysical program will employ both EM and magnetometer methods. The entire area of Source 36-17N will be covered by transects spaced at 10 foot intervals. EM and magnetometer data will be collected on transects and spaced at 20 ft, but offset 10 ft from each other (e.g., EM data will be obtained at lines 0, 20, and 40 ft and magnetometer data at 10, 30, 50 ft). This provides continuous data collected along transects spaced at 10 foot intervals.

A detailed Phase II soil boring program for Source 36-17N will be formulated at the conclusion of this geophysical program. Areas that exhibit anomalies suggestive of disposal trenches will be thoroughly investigated by Phase II boring. For budget estimation and manpower requirement purposes, a proposed Phase II boring program is presented below:

Number of Borings	Depth (ft)	Number of Samples
10	20	50
20	10	60
10	5	20
40		130

Sampling intervals are assumed to be the same for Phase I, that is 0 to 1, 4 to 5, 9 to 10, 14 to 15, and 19 to 20 ft.

The analytical program for Source 36-17N is summarized below. This is only an estimate and is based on the assumption that borings in the northern half of the site (half of the sample total) will be analyzed for the Phase I contaminants and in the southern half will be anlayzed for specified compounds. This assumption is derived from a better understanding of the contaminants in the southern area. Volatile organics will be performed on approximately 10 percent of the sample population.

Analytical Method	Number of Samples
Semi-Volatiles	65
Volatile Organics	13
Metals	130
Organochlorine Compounds	65
Organocsulfur Compounds	65
Arsenic	130
Mercury	130

Following the evaluation of analytical data generated by the Phase I investigative program the boundaries Source 36-17S were also revised. These revisions, shown in Figure 36-17-11b were significant for the southern, western, and northern borders of this area. As no contaminants were detected in significant concentrations in the southern portion of Source 36-17S (Boreholes 3102, 3103, and 3104) this area has been deleted from the Phase II investigation. The revised southern boundary is located through a line connecting Phase I Boreholes 3100 and 3101 as well as "uncontaminated" Borehole 3040 none of which detected contaminant compounds.

The western edge of this source area has been modified to include the area south of Borehole 3097 where DIMP and pesticides were detected and to meet with the revised boundaries of Basin A (Source 36-1) in this area. The exact location of the source boundary in this region is uncertain due to the loss of samples from Borehole 3094 as a result of the presence of mustard. The northwest edge of Source 36-17S has been modified to include an area formerly included in Source 36-1. The reason

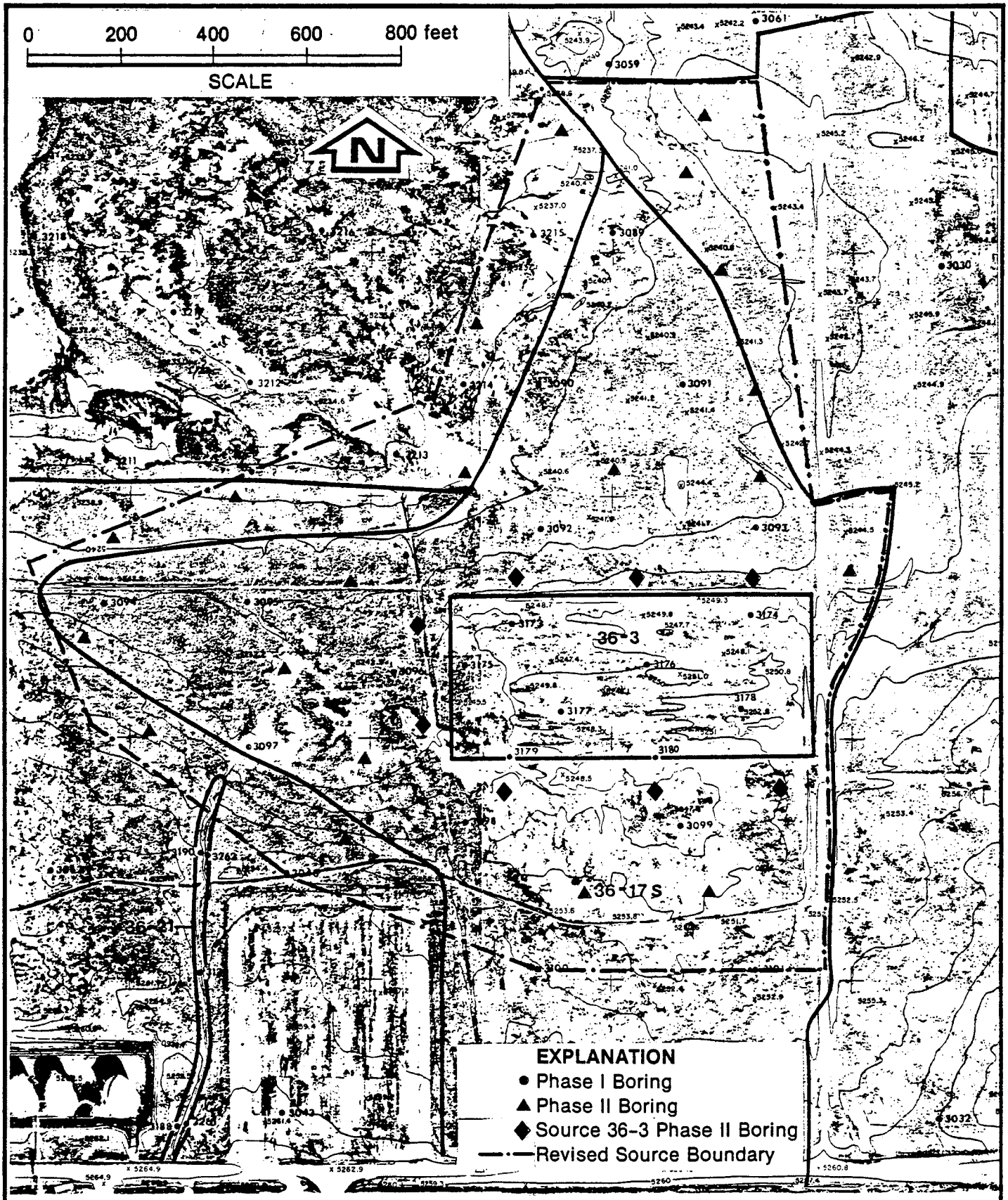


Figure 36-17-11b
PHASE II INVESTIGATION
BORING LOCATION MAP
SOURCE: ESE, 1986

Prepared for:
U.S. Army Program Manager's Office
For Rocky Mountain Arsenal
Aberdeen Proving Ground, Maryland

for this reallocation of this area is the presence of DIMP, organosulfur compounds, and DBCP in Boreholes 3213, 3214, and 3215, which is uncharacteristic of contaminant trends in adjacent portions of Basin A. Again the exact location of this portion of the Source 36-17 boundary is questionable due to the loss of samples from Boreholes 3090 and 3092 as a result of mustard contamination.

The final alteration in the boundary of this source area is in the northeast section. Contaminants detected in Boreholes 3089 and 3059 (Source 36-17N) have caused revisions of the source boundary to connect these two areas. An area of significant vegetation stress in this location is now included within the Source 36-17 boundary. The two portions of Source 36-17 will remain separate even though they are contiguous. The area of this source may be redistributed or subdivided based on Phase II results.

To aid in disposal trench location a geophysical program will be performed directly north of Source 36-3. The techniques utilized and the program design will be the same as for those in Source 36-17N. The results of the Phase II geophysical program will be combined with the results of aerial photograph interpretation and field mapping of surface expressions to design the Phase II soil boring program. As samples from four boreholes in the source area were not analyzed due to the presence of mustard, geophysics and field mapping may be the only method of estimating volumes of contaminated soil unless chemical analyses can be performed at some location on mustard contaminated soils.

The Phase II soil boring program for Source 36-17S will be finalized after geophysical studies are complete. A Phase II program has been proposed for estimation purposes. The exact locations of boreholes and sampling intervals may be altered prior to development of the final Phase II plan.

Source 36-17S Phase II soil sampling plan is shown in Figure 36-17-11b. Eight boreholes proposed adjacent to Source 36-3 are part of the Phase II program for Source 36-3 to define the areal extent of contamination for this source. Modifications of the Source 36-3 boundary will not be made until completion of the Phase II investigation due primarily to lack of data directly north of this source (mustard contaminated soils not analyzed). The Phase II program consists of the construction of 200 soil borings. Sampling intervals will be 0 to 1, 4 to 5, and 9 to 10 ft. Of the 20 remaining boreholes anticipated for this source 9 will be to depths of 5 ft, and 11 to depths of 10 ft.

Number of Borings	Depth (ft)	Number of Samples
11	10	33
9	5	18
TOTAL 30		51

The analytical schedule for this source area is listed below. The lack of chemical data in certain portions of this source area necessitates a repeat of the Phase I analytical schedule. Samples to the north of Source 36-3 will be analyzed for a full range of analtyes. Samples from the six borings south and west of Source 36-3 will be tested for organochlorine pesticides, DBCP, DIMP, and organosulfur compounds (see Figure 36-17-12).

Analytical Method	Number of Samples
Organochlorine pesticides	35
Organosulfur Compounds	17
DBCP	51
Metals	35
Organophosphorus Compounds	33
DIMP/DMMP	33
Arsenic	51
Mercury	51
Volatile Organics	12
Extractable Organics	18

Based on Phase I chemical analysis results, it is anticipated that all Phase II investigations in Source 36-17 will require use of full Level C Protection.

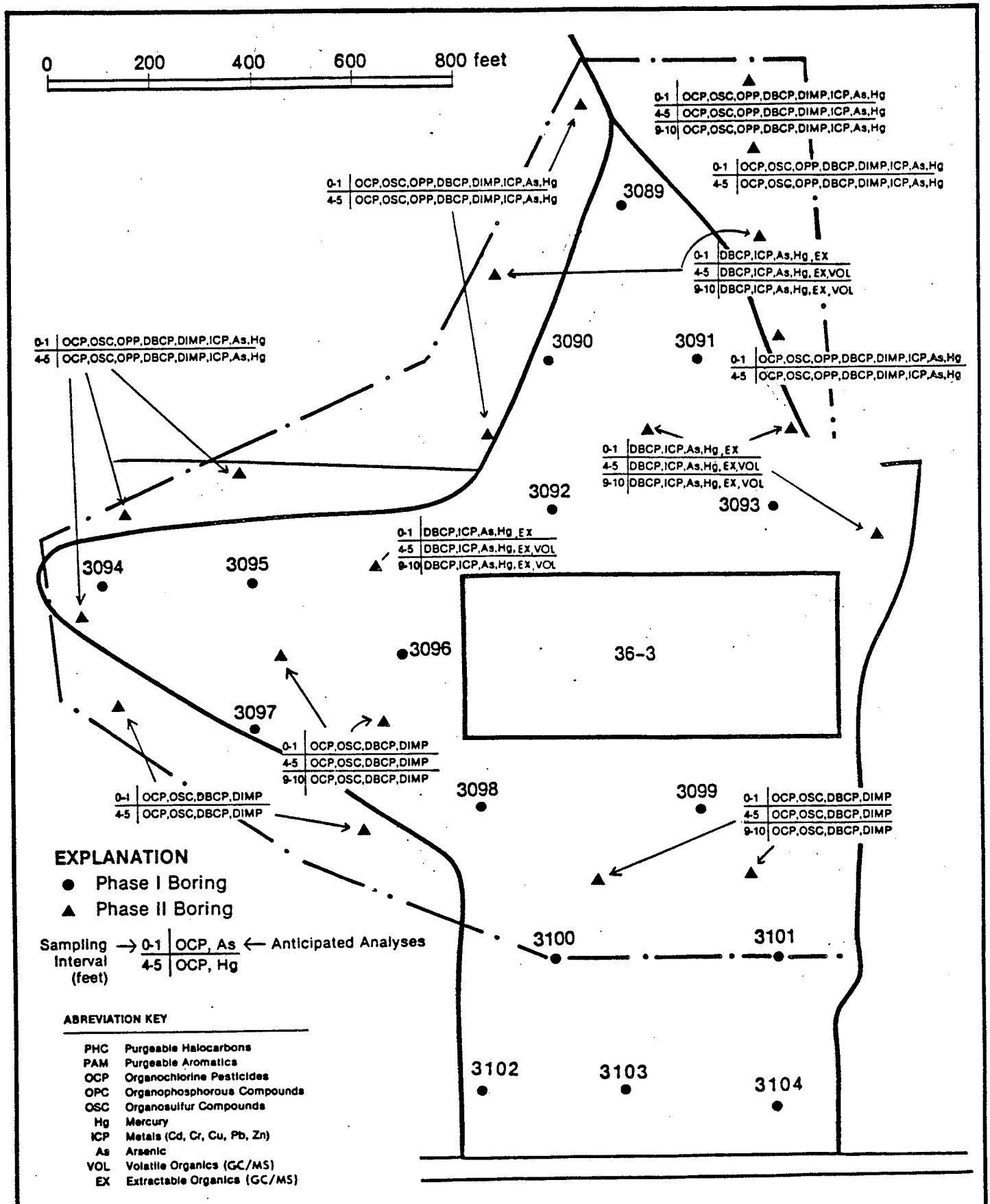


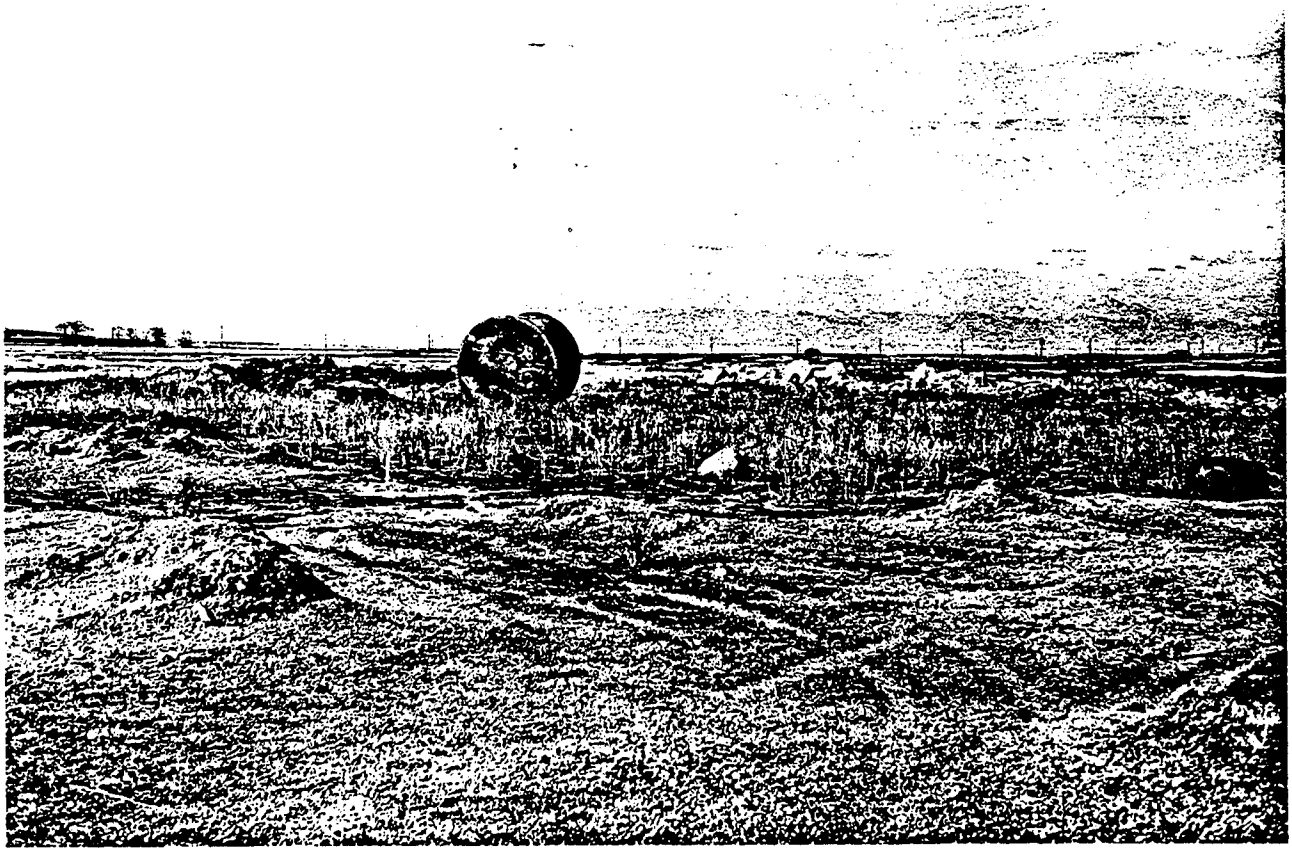
Figure 36-17-12
SOURCE 36-17
PHASE II CHEMICAL ANALYSIS SCHEDULE

SOURCE: ESE, 1986

Prepared for:
U.S. Army Program Manager's Office
For Rocky Mountain Arsenal
Aberdeen Proving Ground, Maryland

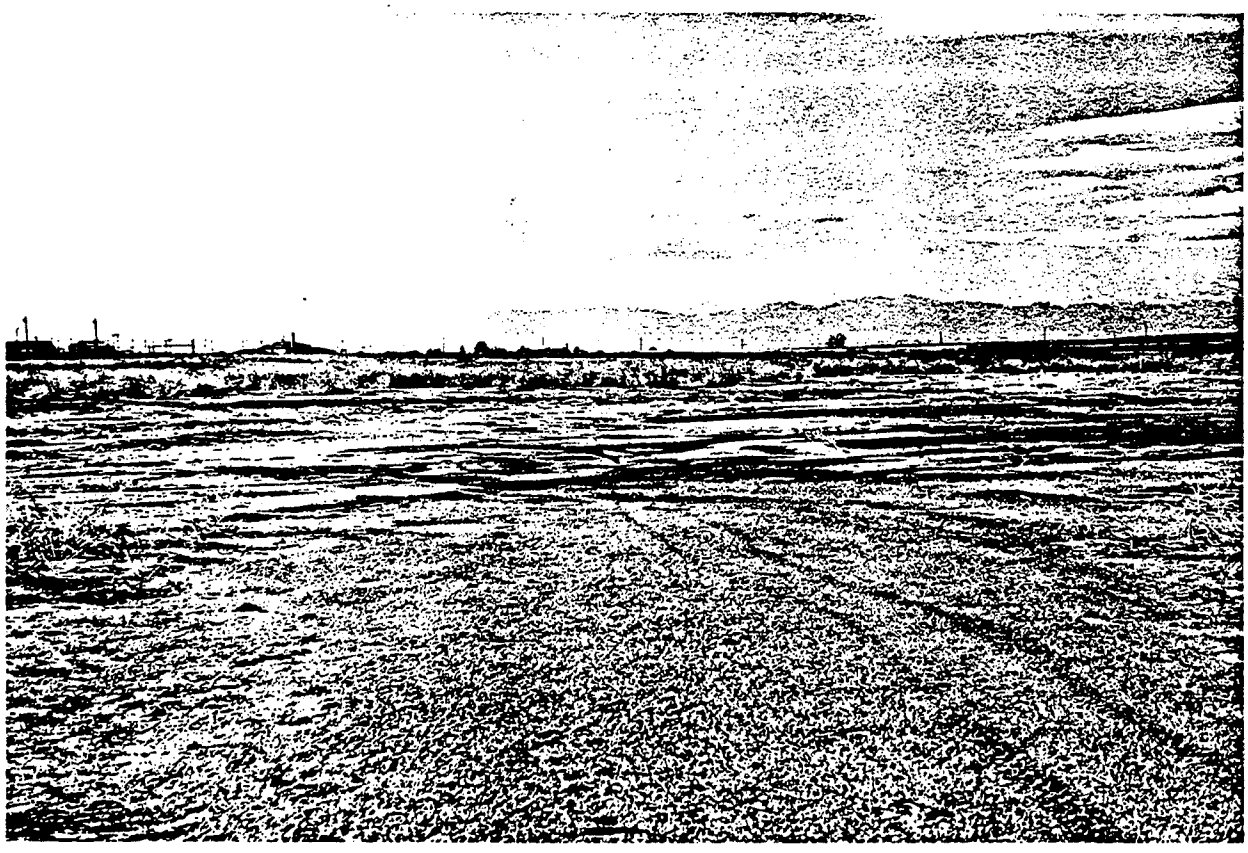
APPENDIX 37-17-A

SOURCE 36-17N
View North



SOURCE 36-17N
View West

SOURCE 36-17S
View Northwest



SOURCE 36-17S
View Southwest

APPENDIX 36-17-B

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3059A 505600	3059B 505601	3060A 505606	3060B 505607	3061A 505612	3061B 505613	3062A 505618	3062B 505619	3063A 505624	3063B 505625
DATE		6/25/85	6/25/85	06/27/85	06/27/85	6/25/85	6/25/85	06/27/85	06/27/85	06/27/85	06/27/85
TIME		1247	1300	1301	1313	1330	1340	956	1009	1346	1358
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99758 0	0	122	0	122	0	122	0	122	0	122
SITE TYPE 1	99759 0	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	S	S	S	S	S	S	S	S	S	S
MOISTURE(ZWET WT)	70320 0	9.2	6.1	7.7	3.3	2.5	1.9	7.5	4.5	5.0	5.3
CADMIUM,SED (UG/G-DRY)	1028 0	<0.9	<0.9	<0.5	<0.5	<0.9	<0.9	<0.5	<0.5	<0.5	<0.5
CR,SOIL (UG/G-DRY)	99584 0	16	10	14	<7	18	<7	11	12	11	9
COPPER,SED (UG/G-DRY)	1043 0	8	<5	15	8	11	5	14	11	20	9
LEAD,SED (UG/G-DRY)	1052 0	27	<17	<16	<16	29	<17	<16	<16	<16	<16
ZINC,SED (UG/G-DRY)	1093 0	57	32	39	37	70	26	<28	37	64	<28
ARSENIC,SED (UG/G-DRY)	1003 0	7.9	<4.7	<5.2	<5.2	6.7	<4.7	<5.2	<5.2	<5.2	<5.2
MERCURY,SED (UG/G-DRY)	71921 0	0.15	<0.05	<0.07	<0.07	<0.05	<0.05	<0.07	<0.07	<0.07	<0.07
ALDRIN,SED (UG/G-DRY)	98356 0	<0.900	<0.900	<0.500	<0.500	<0.900	<0.900	<0.500	<0.500	<0.500	<0.500
DIELDRIN(UG/G-DRY)	98365 0	<0.300	<0.300	<0.600	<0.600	<0.300	<0.300	<0.600	<0.600	<0.600	<0.600
DDT,PP'(UG/G-DRY)	98364 0	<0.400	<0.400	<2.00	<2.00	<0.400	<0.400	<2.00	<2.00	<2.00	<2.00
ENDRIN (UG/G-DRY)	98369 0	<0.700	<0.700	<4.00	<4.00	<0.700	<0.700	<4.00	<4.00	<4.00	<4.00
CHLORDANE,SED(UG/G-DRY)	98361 0	70.1	<1.00	<6.00	<6.00	<1.00	<1.00	<6.00	<6.00	<6.00	<6.00
DDE,PP'(UG/G-DRY)	98363 0	<0.300	<0.300	<0.500	<0.500	<0.300	<0.300	<0.500	<0.500	<0.500	<0.500
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.300	<0.300	<0.500	<0.500	<0.300	<0.300	<0.500	<0.500	<0.500	<0.500

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3059A 505600	3059B 505601	3060A 505606	3060B 505607	3061A 505612	3061B 505613	3062A 505618	3062B 505619	3063A 505624	3063B 505625
DATE		6/25/85	6/25/85	06/27/85	06/27/85	6/25/85	6/25/85	06/27/85	06/27/85	06/27/85	06/27/85
TIME		1247	1300	1301	1313	1330	1340	956	1009	1346	1356
DIMP (UG/G-DRY)	98645 0	<0.500	0.941	<3.00	<3.00	<0.500	<0.500	<3.00	<3.00	<3.00	<3.00
DICHLORVOS (UG/G-DRY)	98646 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
HEXCLCYPENDI (UG/G-DRY)	98647 0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MALATHION (UG/G-DRY)	98648 0	<0.600	<0.600	<2.00	<2.00	<0.600	<0.600	<2.00	<2.00	<2.00	<2.00
ISODRIN (UG/G-DRY)	98649 0	<0.300	<0.300	<0.600	<0.600	<0.300	<0.300	<0.600	<0.600	<0.600	<0.600
1,4 DITHIANE (UG/G-DRY)	98650 0	<0.300	<0.300	<2.00	<2.00	<0.300	<0.300	<2.00	<2.00	<2.00	<2.00
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<0.300	<0.300	<6.00	<6.00	<0.300	<0.300	<6.00	<6.00	<6.00	<6.00
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<0.400	<0.400	<1.00	<1.00	<0.400	<0.400	<1.00	<1.00	<1.00	<1.00
ATRAZINE (UG/G-DRY)	98655 0	<0.700	<0.700	<0.500	<0.500	<0.700	<0.700	<0.500	<0.500	<0.500	<0.500
SUPONA (UG/G-DRY)	98656 0	<0.500	<0.500	<0.900	<0.900	<0.500	<0.500	<0.900	<0.900	<0.900	<0.900
DNMP (UG/G-DRY)	98657 0	<2.00	<2.00	<3.00	<3.00	<2.00	<2.00	<3.00	<3.00	<3.00	<3.00
ETY*PARATHION (UG/G-DRY)	98658 0	<0.700	<0.700	<2.00	<2.00	<0.700	<0.700	<2.00	<2.00	<2.00	<2.00
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZENE (UG/G-DRY)	98681 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROFORM (UG/G-DRY)	98682 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLORDETHANE (UG/G-DRY)	98683 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLORDETHANE (UG/G-DRY)	98684 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3059A 505600	3059B 505601	3060A 505606	3060B 505607	3061A 505612	3061B 505613	3062A 505616	3062B 505619	3063A 505624	3063B 505625
DATE		6/25/85	6/25/85	06/27/85	06/27/85	6/25/85	6/25/85	06/27/85	06/27/85	06/27/85	06/27/85
TIME		1247	1300	1301	1313	1330	1340	956	1009	1346	1358
TRANS-1,2-DICHLOROETHENE(UG/G-D	98687 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE (UG/G-DRY)	98688 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE (UG/G-DRY)	98689 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE (UG/G-DRY)	98690 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOLUENE (UG/G-DRY)	98691 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE(UG/G-D)	98692 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROETHANE(UG/G-D)	98693 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRICHLOROETHENE (UG/G-DRY)	98694 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
M-XYLENE (UG/G-DRY)	98695 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MIBK (UG/G-DRY)	98696 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DMDS (UG/G-DRY)	98697 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZENE (UG/G-DRY)	98699 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCPMSO2 UG/G-DRY	98703 0	<0.300	<0.300	<0.400	<0.400	<0.300	<0.300	<0.400	<0.400	<0.400	<0.400
COORDINATE,E/W(SIP)	98393 0	2186494	2186494	2187550	2187550	2186802	2186802	2187549	2187549	2187854	2187854
COORDINATE,N/S(SIP)	98392 0	182870	182870	182664	182664	182966	182966	182962	182962	183123	183123
UNK542 (UG/G)	90024 0			NA	NA			1.19	1.05	NA	NA
UNK579 (UG/G)	90043 0							0.432	2.09		
UNK609 (UG/G)	90066 0	* 0.869		NA	NA			0.973	3.14	NA	NA
UNK633 (UG/G)	90085 0					* 0.412		0.540	2.09	0.631	

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3059A 505600	3059B 505601	3060A 505606	3060B 505607	3061A 505612	3061B 505613	3062A 505618	3062B 505619	3063A 505624	3063B 505625
DATE		6/25/85	6/25/85	06/27/85	06/27/85	6/25/85	6/25/85	06/27/85	06/27/85	06/27/85	06/27/85
TIME		1247	1300	1301	1313	1330	1340	956	1009	1346	1359
UNK634 (UG/G)	90086 0		* 0.310	NA	NA		* 0.412	0.324	IL	NA	NA
UNK544 (UG/G)	90026 0			NA	NA			IL	0.314	NA	NA
UNK629 (UG/G)	90082 0							IL	IL		
UNK604 (UG/G)	90061 0			NA	NA			IL	IL	NA	NA
UNK621 (UG/G)	90075 0			NA	NA			IL	IL	NA	NA
UNK596 (UG/G)	90055 0			NA	NA			IL	IL	NA	NA
UNK601 (UG/G)	90058 0			NA	NA			IL	IL	NA	NA
UNK606 (UG/G)	90063 0			NA	NA			IL	IL	NA	NA
UNK612 (UG/G)	90068 0	* 0.689		NA	NA			IL	IL	NA	NA
UNK613 (UG/G)	90069 0			NA	NA			IL	IL	NA	NA
UNK617 (UG/G)	90072 0			NA	NA			IL	IL	NA	NA
UNK622 (UG/G)	90076 0			NA	NA			IL	IL	NA	NA
UNK608 (UG/G)	90065 0			0.325				NA	NA	0.316	
UNK615 (UG/G)	90071 0			0.975				NA	NA		
UNK614 (UG/G)	90070 0	* 1.65			1.03	* 0.915		NA	NA		0.345
UNK635 (UG/G)	90087 0							NA	NA		2.11
UNK602 (UG/G)	90059 0							NA	NA		
UNK545 (UG/G)	90027 0			NA	NA			IL	IL	NA	NA
UNK523 (UG/G)	90092 0		* 0.384			* 0.321	* 0.298				
UNK611 (UG/G)	90067 0	* 5.15									

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617M
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	3059A 505600	3059B 505601	3060A 505606	3060B 505607	3061A 505612	3061B 505613	3062A 505618	3062B 505619	3063A 505624	3063B 505625
DATE		6/25/85	6/25/85	06/27/85	06/27/85	6/25/85	6/25/85	06/27/85	06/27/85	06/27/85	06/27/85
TIME		1247	1300	1301	1313	1330	1340	956	1009	1346	1358
UNK619 (UG/G)	90105 0	* 0.605									
UNK637 (UG/G)	90089 0		* 0.707				* 0.867				
UNK654 (UG/G)	90113 0		* 0.375				* 0.438				
UNK631 (UG/G)	90083 0					* 0.375					
UNK636 (UG/G)	90088 0					* 0.713					
UNK641 (UG/G)	90107 0						* 0.311				
UNK530 (UG/G)	90019 0										
UNK554 (UG/G)	90096 0										
UNK555 (UG/G)	90097 0										

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3064A 505630	3064B 505631	3065A 505636	3065B 505637	3065C 505638	3066A 505642	3066B 505643	3067A 505648	3067B 505649	3067C 505650
DATE		06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/27/85	06/27/85	06/27/85
TIME		1014	1031	1340	1358	1414	1059	1115	715	732	753
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99758 0	0	122	0	122	274	0	122	0	122	274
SITE TYPE 1	99759 0	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	S	S	S	S	S	S	S	S	S	S
MOISTURE(WET WT)	70320 0	7.4	3.4	10.3	8.6	14.7	7.6	5.6	6.2	3.4	9.7
CADMIUM,SED (UG/G-DRY)	1028 0	<0.5	2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.7
CR,SOIL (UG/G-DRY)	99584 0	13	10	10	11	14	10	<7	10	10	14
COPPER,SED (UG/G-DRY)	1043 0	11	8	11	10	13	12	7	11	9	22
LEAD,SED (UG/G-DRY)	1052 0	<16	<16	<16	<16	<16	<16	<16	<16	<16	<16
ZINC,SED (UG/G-DRY)	1093 0	35	<28	<28	<28	37	<28	<28	34	<28	51
ARSENIC,SED (UG/G-DRY)	1003 0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
MERCURY,SED (UG/G-DRY)	71921 0	0.17	0.11	0.12	<0.07	0.17	0.12	<0.07	0.09	<0.07	<0.07
ALDRIN,SED (UG/G-DRY)	98356 0	<0.500	<0.500	>1000	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
DIELDRIN(UG/G-DRY)	98365 0	<0.600	<0.600	>499	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600
DDT,PP'(UG/G-DRY)	98364 0	<2.00	<2.00	<20.0	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
ENDRIN (UG/G-DRY)	98369 0	<4.00	<4.00	<40.0	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
CHLORDANE,SED(UG/G-DRY)	98361 0	<6.00	<6.00	<60.0	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00
DDE,PP'(UG/G-DRY)	98363 0	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3064A 505630	3064B 505631	3065A 505636	3065B 505637	3065C 505638	3066A 505642	3066B 505643	3067A 505648	3067B 505649	3067C 505650
DATE		06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/27/85	06/27/85	06/27/85
TIME		1014	1031	1340	1358	1414	1059	1115	715	732	753
DIMP (UG/G-DRY)	98645 0	<3.00	<3.00	<30.0	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
DICHLORVOS (UG/G-DRY)	98646 0	<0.300	<0.300	<3.00	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
HEXCLCYPENDI (UG/G-DRY)	98647 0	<1.00	<1.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MALATHION (UG/G-DRY)	98648 0	<2.00	<2.00	<20.0	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
ISODRIN (UG/G-DRY)	98649 0	<0.600	<0.600	<6.00	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600
1,4 DITHIANE (UG/G-DRY)	98650 0	<2.00	<2.00	<20.0	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<6.00	<6.00	<60.0	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300	<0.300	<3.00	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<1.00	<1.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
ATRAZINE (UG/G-DRY)	98655 0	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
SUPONA (UG/G-DRY)	98656 0	<0.900	<0.900	<9.00	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900
DMMP (UG/G-DRY)	98657 0	<3.00	<3.00	<30.0	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
ETY*PARATHION (UG/G-DRY)	98658 0	<2.00	<2.00	<20.0	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.400
CHLOROBENZENE (UG/G-DRY)	98681 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.300
CHLOROFORM (UG/G-DRY)	98682 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.700
1,1-DICHLORDETHANE (UG/G-DRY)	98683 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.500
1,2-DICHLORDETHANE (UG/G-DRY)	98684 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.400
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.800

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617M
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3064A 505630	3064B 505631	3065A 505636	3065B 505637	3065C 505638	3066A 505642	3066B 505643	3067A 505648	3067B 505649	3067C 505650
DATE		06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/27/85	06/27/85	06/27/85
TIME		1014	1031	1340	1358	1414	1059	1115	715	732	753
TRANS-1,2-DICHLORDET ENE(UG/G-D	98687 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.300
ETHYLBENZENE (UG/G-DRY)	98688 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.400
METHYLENE CHLORIDE (UG/G-DRY)	98689 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
TETRACHLORDETHENE (UG/G-DRY)	98690 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.500
TOLUENE (UG/G-DRY)	98691 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.300
1,1,1-TRICHLORDETHAN E(UG/G-D)	98692 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.500
1,1,2-TRICHLORDETHAN E(UG/G-D)	98693 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.600
TRICHLORDETHENE (UG/G-DRY)	98694 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.600
M-XYLENE (UG/G-DRY)	98695 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.300
MIBK (UG/G-DRY)	98696 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.400
DMDS (UG/G-DRY)	98697 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<4.30
BENZENE (UG/G-DRY)	98699 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.10
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.500
PCPMSO2 UG/G-DRY	98703 0	<0.400	<0.400	<4.00	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400
COORDINATE,E/W(SIP)	98393 0	2187101	2187101	2186590	2186590	2186590	2186952	2186952	2187554	2187554	2187554
COORDINATE,N/S(SIP)	98392 0	183127	183127	183110	183110	183110	183273	183273	183264	183264	183264
UNK542 (UG/G)	90024 0	0.324	0.932	IL	1.53	1.64	0.866	1.38	2.13	1.04	
UNK579 (UG/G)	90043 0	0.324	0.414	IL	0.547	0.469	0.541	0.956	0.533	0.518	
UNK609 (UG/G)	90066 0	0.324	0.518	IL	IL	0.352	IL	0.319	0.427	0.311	
UNK633 (UG/G)	90085 0	IL	0.311	11.2	IL	0.352	0.325	0.956	0.747	0.621	0.777

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3064A 505630	3064B 505631	3065A 505636	3065B 505637	3065C 505638	3066A 505642	3066B 505643	3067A 505648	3067B 505649	3067C 505650
DATE		06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/27/85	06/27/85	06/27/85
TIME		1014	1031	1340	1358	1414	1059	1115	715	732	753
UNK634 (UG/G)	90086 0	IL	IL	IL	IL	IL	IL	IL	IL	IL	
UNK544 (UG/G)	90026 0	IL	IL	IL	IL	IL	IL	IL	IL	IL	
UNK629 (UG/G)	90082 0	2.16	IL	IL	3.39	IL	IL	IL	IL	IL	
UNK604 (UG/G)	90061 0	IL	IL	22.3	0.985	IL	IL	IL	IL	IL	
UNK621 (UG/G)	90075 0	IL	IL	100	0.547	IL	IL	IL	IL	IL	
UNK596 (UG/G)	90055 0	IL	IL	22.3	IL	IL	IL	IL	IL	IL	
UNK601 (UG/G)	90058 0	IL	IL	22.3	IL	IL	IL	IL	IL	IL	
UNK606 (UG/G)	90063 0	IL	IL	22.3	IL	IL	IL	IL	IL	IL	
UNK612 (UG/G)	90068 0	IL	IL	11.2	IL	IL	IL	IL	IL	IL	
UNK613 (UG/G)	90069 0	IL	IL	22.3	IL	IL	IL	IL	IL	IL	
UNK617 (UG/G)	90072 0	IL	IL	44.6	IL	IL	IL	IL	IL	IL	
UNK622 (UG/G)	90076 0	IL	IL	22.3	IL	IL	IL	IL	IL	IL	
UNK608 (UG/G)	90065 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.555
UNK615 (UG/G)	90071 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
UNK614 (UG/G)	90070 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.55
UNK635 (UG/G)	90087 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.11
UNK602 (UG/G)	90059 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.555
UNK545 (UG/G)	90027 0	IL	IL	IL	IL	IL	IL	IL	IL	IL	
UNK523 (UG/G)	90092 0										
UNK611 (UG/G)	90067 0										

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3064A 505630	3064B 505631	3065A 505636	3065B 505637	3065C 505638	3066A 505642	3066B 505643	3067A 505648	3067B 505649	3067C 505650
DATE		06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/26/85	06/27/85	06/27/85	06/27/85
TIME		1014	1031	1340	1358	1414	1059	1115	715	732	753
UNK619 (UG/G)	90105										
	0										
UNK637 (UG/G)	90089										
	0										
UNK654 (UG/G)	90113										
	0										
UNK631 (UG/G)	90083										
	0										
UNK636 (UG/G)	90088										
	0										
UNK641 (UG/G)	90107										
	0										
UNK530 (UG/G)	90019										
	0										
UNK554 (UG/G)	90096										
	0										
UNK555 (UG/G)	90097										
	0										

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3067D 505651	3067E 505652	3068A 505654	3068B 505655	3069A 505660	3069B 505661	3069C 505662	3069D 505663	3070A 505666	3070B 505667
DATE		06/27/85	06/27/85	06/27/85	06/27/85	7/1/85	7/1/85	7/1/85	7/1/85	7/1/85	7/1/85
TIME		822	852	1446	1502	748	804	828	933	1104	1120
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99758 0	427	579	0	122	0	122	274	427	0	122
SITE TYPE 1	99759 0	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	S	S	S	S	S	S	S	S	S	S
MOISTURE(%WET WT)	70320 0	17.8	20.0	5.3	4.7	7.2	3.4	7.1	18.1	9.2	6.7
CADMIUM,SED (UG/G-DRY)	1028 0	0.9	1.0	<0.5	<0.5	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9
CR,SOIL (UG/G-DRY)	99584 0	14	15	14	10	9	<7	9	34	<7	11
COPPER,SED (UG/G-DRY)	1043 0	41	46	16	10	8	5	8	25	15	9
LEAD,SED (UG/G-DRY)	1052 0	25	22	21	<16	<17	<17	<17	21	<17	<17
ZINC,SED (UG/G-DRY)	1093 0	90	86	44	32	32	24	35	69	42	43
ARSENIC,SED (UG/G-DRY)	1003 0	<5.2	<5.2	<5.2	<5.2	<4.7	<4.7	6.1	<4.7	4.7	5.5
MERCURY,SED (UG/G-DRY)	71921 0	<0.07	<0.07	<0.07	<0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ALDRIN,SED (UG/G-DRY)	98356 0	<0.500	<0.500	<0.500	<0.500	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900
DIELDRIN(UG/G-DRY)	98365 0	<0.600	<0.600	<0.600	<0.600	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
DDT,PP'(UG/G-DRY)	98364 0	<2.00	<2.00	<2.00	<2.00	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400
ENDRIN (UG/G-DRY)	98369 0	<4.00	<4.00	<4.00	<4.00	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
CHLORDANE,SED(UG/G-DRY)	98361 0	<6.00	<6.00	<6.00	<6.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
DDE,PP'(UG/G-DRY)	98363 0	<0.500	<0.500	<0.500	<0.500	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.500	<0.500	<0.500	<0.500	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GLISZLER/BERGDULL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 30670 505651	3067E 505652	3068A 505654	3068B 505655	3069A 505660	3069B 505661	3069C 505662	3069D 505663	3070A 505666	3070B 505667
DATE		06/27/85	06/27/85	06/27/85	06/27/85	7/1/85	7/1/85	7/1/85	7/1/85	7/1/85	7/1/85
TIME		822	852	1446	1502	748	804	828	933	1104	1120
DIMP (UG/G-DRY)	98645 0	<3.00	<3.00	<3.00	<3.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
DICHLORVOS (UG/G-DRY)	98646 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
HEXACLOROPENDI (UG/G-DRY)	98647 0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MALATHION (UG/G-DRY)	98648 0	<2.00	<2.00	<2.00	<2.00	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600
ISODRIN (UG/G-DRY)	98649 0	<0.600	<0.600	<0.600	<0.600	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
1,4 DITHIANE (UG/G-DRY)	98650 0	<2.00	<2.00	<2.00	<2.00	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<6.00	<6.00	<6.00	<6.00	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<1.00	<1.00	<1.00	<1.00	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400
ATRAZINE (UG/G-DRY)	98655 0	<0.500	<0.500	<0.500	<0.500	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
SUPONA (UG/G-DRY)	98656 0	<0.900	<0.900	<0.900	<0.900	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
DMMP (UG/G-DRY)	98657 0	<3.00	<3.00	<3.00	<3.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
ETY*PARATHION (UG/G-DRY)	98658 0	<2.00	<2.00	<2.00	<2.00	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0	NA	<0.400	NA	NA	NA	NA	NA		NA	NA
CHLOROBENZENE (UG/G-DRY)	98681 0	NA	<0.300	NA	NA	NA	NA	NA		NA	NA
CHLOROFORM (UG/G-DRY)	98682 0	NA	<0.700	NA	NA	NA	NA	NA		NA	NA
1,1-DICHLOROETHANE (UG/G-DRY)	98683 0	NA	<0.500	NA	NA	NA	NA	NA		NA	NA
1,2-DICHLOROETHANE (UG/G-DRY)	98684 0	NA	<0.400	NA	NA	NA	NA	NA		NA	NA
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0	NA	<0.800	NA	NA	NA	NA	NA		NA	NA

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617M
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 30670 505651	3067E 505652	3068A 505654	30688 505655	3069A 505660	30698 505661	3069C 505662	3069D 505663	307CA 505666	307CB 505667
DATE		06/27/85	06/27/85	06/27/85	06/27/85	7/1/85	7/1/85	7/1/85	7/1/85	7/1/85	7/1/85
TIME		822	852	1446	1502	748	804	828	933	1104	1123
TRANS-1,2-DICHLOROET ENE(UG/G-D	98687 0	NA	<0.800	NA	NA	NA	NA	NA		NA	NA
ETHYLBENZENE (UG/G-DRY)	98688 0	NA	<0.400	NA	NA	NA	NA	NA		NA	NA
METHYLENE CHLORIDE (UG/G-DRY)	98689 0	NA		NA	NA	NA	NA	NA		NA	NA
TETRACHLOROETHENE (UG/G-DRY)	98690 0	NA	<0.500	NA	NA	NA	NA	NA		NA	NA
TOLUENE (UG/G-DRY)	98691 0	NA	<0.300	NA	NA	NA	NA	NA		NA	NA
1,1,1-TRICHLOROETHAN E(UG/G-D)	98692 0	NA	<0.500	NA	NA	NA	NA	NA		NA	NA
1,1,2-TRICHLOROETHAN E(UG/G-D)	98693 0	NA	<0.600	NA	NA	NA	NA	NA		NA	NA
TRICHLOROETHENE (UG/G-DRY)	98694 0	NA	<0.600	NA	NA	NA	NA	NA		NA	NA
M-XYLENE (UG/G-DRY)	98695 0	NA	<0.300	NA	NA	NA	NA	NA		NA	NA
MIBK (UG/G-DRY)	98696 0	NA	<0.400	NA	NA	NA	NA	NA		NA	NA
DMDS (UG/G-DRY)	98697 0	NA	<4.00	NA	NA	NA	NA	NA		NA	NA
BENZENE (UG/G-DRY)	98699 0	NA	<1.00	NA	NA	NA	NA	NA		NA	NA
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0	NA	<0.500	NA	NA	NA	NA	NA		NA	NA
PCPNSU2 UG/G-DRY	93703 0	<0.400	<0.400	<0.400	<0.400	<0.300	<0.300	<0.300	<0.300	<0.300	<0.310
COORDINATE,E/W(STP)	98393 0	2187554	2187554	2187848	2187848	2187252	2187252	2187252	2187252	2187096	2187335
COORDINATE,N/S(STP)	98392 0	183264	183264	183415	183415	183419	183419	183419	183419	183591	183591
UNK542 (UG/G)	90024 0	NA		NA	NA	* C.997					
UNK579 (UG/G)	90043 0	NA		0.211							
UNK609 (UG/G)	90066 0	NA		NA	NA						
UNK633 (UG/G)	90085 0	NA	0.500								

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617H
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3067D 505651	3067E 505652	3068A 505654	3068B 505655	3069A 505660	3069B 505661	3069C 505662	3069D 505663	3070A 505666	3070B 505667
DATE		06/27/85	06/27/85	06/27/85	06/27/85	7/1/85	7/1/85	7/1/85	7/1/85	7/1/85	7/1/85
TIME		822	852	1446	1502	748	804	828	933	1104	1120
UNK634 (UG/G)	90086 0	NA		NA	NA						
UNK544 (UG/G)	90026 0	NA		NA	NA				* 1.48		
UNK629 (UG/G)	90062 0	NA									
UNK604 (UG/G)	90061 0	NA		NA	NA						
UNK621 (UG/G)	90075 0	NA		NA	NA						
UNK596 (UG/G)	90055 0	NA		NA	NA						
UNK601 (UG/G)	90058 0	NA		NA	NA						
UNK606 (UG/G)	90063 0	NA		NA	NA						
UNK612 (UG/G)	90068 0	NA		NA	NA						
UNK613 (UG/G)	90069 0	NA		NA	NA						
UNK617 (UG/G)	90072 0	NA		NA	NA						
UNK622 (UG/G)	90076 0	NA		NA	NA						
UNK608 (UG/G)	90065 0	NA		0.317							
UNK615 (UG/G)	90071 0	NA									
UNK614 (UG/G)	90070 0	NA	0.750		0.525		* 5.63	* 1.72	* 2.43	* 2.26	
UNK635 (UG/G)	90087 0	NA			0.630						
UNK602 (UG/G)	90059 0	NA									
UNK545 (UG/G)	90027 0	NA		NA	NA						
UNK523 (UG/G)	90092 0										
UNK611 (UG/G)	90067 0										

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3067D 505651	3067E 505652	3068A 505654	3068B 505655	3069A 505660	3069B 505661	3069C 505662	3069D 505663	3069A 505666	3069B 505667
DATE		06/27/85	06/27/85	06/27/85	06/27/85	7/1/85	7/1/85	7/1/85	7/1/85	7/1/85	7/1/85
TIME		822	852	1446	1502	748	804	828	933	1104	1120
UNK619 (UG/G)	90105 0										
UNK637 (UG/G)	90089 0										
UNK654 (UG/G)	90113 0										
UNK631 (UG/G)	90083 0										
UNK636 (UG/G)	90088 0										
UNK641 (UG/G)	90107 0										
UNK530 (UG/G)	90019 0					* 4.83		* 2.15			
UNK554 (UG/G)	90096 0					* 1.06					
UNK555 (UG/G)	90097 0					* 9.32		* 2.97			

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3065Z 505672	BLK 505680	BLK 505681	BLK 505690	BLK 505691	BLK 505692
DATE		06/26/85	6/25/85	7/1/85	06/27/85	06/27/85	06/27/85
TIME		1428	0	0	0	0	0
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99758 0	366	0	0	0	0	0
SITE TYPE 1	99759 0	BORE	QCMB	QCMB	QCMB	QCMB	QCMB
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	S	G	G	S	S	S
MOISTURE(%WET WT)	70320 0	21.2	2.0	2.6	2.0	2.0	2.0
CADMIUM,SED (UG/G-DRY)	1028 0	<0.5	<0.9	NA	NA	NA	NA
CR,SOIL (UG/G-DRY)	99584 0	20	11				
COPPER,SED (UG/G-DRY)	1043 0	19	9				
LEAD,SED (UG/G-DRY)	1052 0	<16	18				
ZINC,SED (UG/G-DRY)	1093 0	69	40				
ARSENIC,SED (UG/G-DRY)	1003 0	<5.2	5.9		<5.2		
MERCURY,SED (UG/G-DRY)	71921 0	<0.07	<0.05			<0.07	<0.07
ALDRIN,SED (UG/G-DRY)	98356 0	<0.500	<0.900	<0.900	<0.500	<0.500	
DIELDRIN(UG/G-DRY)	98365 0	<0.600	<0.300	<0.300	<0.600	<0.600	
DDT,PP'(UG/G-DRY)	98364 0	<2.00	<0.400	<0.400	<2.00	<2.00	
ENDRIN (UG/G-DRY)	98369 0	<4.00	<0.700	<0.700	<4.00	<4.00	
CHLORDANE,SED(UG/G-DRY)	98361 0	<6.00	<1.00	<1.00	<6.00	<6.00	
DDE,PP'(UG/G-DRY)	98363 0	<0.500	<0.300	<0.300	<0.500	<0.500	
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.500	<0.300	<0.300	<0.500	<0.500	

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 30652 505672	BLK 505680	BLK 505681	BLK 505690	BLK 505691	BLK 505692
DATE		06/26/85	6/25/85	7/1/85	06/27/85	06/27/85	06/27/85
TIME		1428	0	0	0	0	0
DIMP (UG/G-DRY)	98645 0	<3.00	<0.500	<0.500	<3.00	<3.00	
DICHLORVOS (UG/G-DRY)	98646 0	<0.300	<0.300	<0.300	<0.300	<0.300	
HEXCLCYPENDI (UG/G-DRY)	98647 0	<1.00	<1.00	<1.00	<1.00	<1.00	
MALATHION (UG/G-DRY)	98648 0	<2.00	<0.600	<0.600	<2.00	<2.00	
ISODRIN (UG/G-DRY)	98649 0	<0.600	<0.300	<0.300	<0.600	<0.600	
1,4 DITHIANE (UG/G-DRY)	98650 0	<2.00	<0.300	<0.300	<2.00	<2.00	
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<6.00	<0.300	<0.300	<6.00	<6.00	
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005		<0.005	<0.005	<0.005	<0.005
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300	<0.300	<0.300	<0.300	<0.300	
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<1.00	<0.400	<0.400	<1.00	<1.00	
ATRAZINE (UG/G-DRY)	98655 0	<0.500	<0.700	<0.700	<0.500	<0.500	
SUPONA (UG/G-DRY)	98656 0	<0.900	<0.500	<0.500	<0.900	<0.900	
DMMP (UG/G-DRY)	98657 0	<3.00	<2.00	<2.00	<3.00	<3.00	
ETY*PARATHION (UG/G-DRY)	98658 0	<2.00	<0.700	<0.700	<2.00	<2.00	
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0	<0.400			<0.400		
CHLOROBENZENE (UG/G-DRY)	98681 0	<0.300			<0.300		
CHLOROFORM (UG/G-DRY)	98682 0	<0.700			<0.700		
1,1-DICHLORDETHANE (UG/G-DRY)	98683 0	<0.500			<0.500		
1,2-DICHLORDETHANE (UG/G-DRY)	98684 0	<0.400			<0.400		
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0	<0.800			<0.800		

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/SEFCOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3065Z 505672	BLK 505680	BLK 505681	BLK 505690	BLK 505691	BLK 505692
DATE		06/26/85	6/25/85	7/1/85	06/27/85	06/27/85	06/27/85
TIME		1428	0	0	0	0	0
TRANS-1,2-DICHLORDET ENE(UG/G-D	98687 0	<0.800			<0.800		
ETHYLBENZENE (UG/G-DRY)	98688 0	<0.400			<0.400		
METHYLENE CHLORIDE (UG/G-DRY)	98689 0						
TETRACHLORDETHENE (UG/G-DRY)	98690 0	<0.500			<0.500		
TOLUENE (UG/G-DRY)	98691 0	<0.300			<0.300		
1,1,1-TRICHLORDETHAN E(UG/G-D)	98692 0	<0.500			<0.500		
1,1,2-TRICHLORDETHAN E(UG/G-D)	98693 0	<0.600			<0.600		
TRICHLORDETHENE (UG/G-DRY)	98694 0	<0.600			<0.600		
M-XYLENE (UG/G-DRY)	98695 0	<0.300			<0.300		
MIBK (UG/G-DRY)	98696 0	<0.400			0.850		
DMDS (UG/G-DRY)	98697 0	<4.00			<4.00		
BENZENE (UG/G-DRY)	98699 0	<1.00			<1.00		
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0	<0.500			<0.500		
PCPMSO2 UG/G-DRY	98703 0	<0.400	<0.300	<0.300	<0.400	<0.400	
COORDINATE,E/W(STP)	98393 0	2186590					
COORDINATE,N/S(STP)	98392 0	183110					
UNK542 (UG/G)	90024 0					IL	
UNK579 (UG/G)	90043 0					IL	
UNK609 (UG/G)	90066 0					1.02	
UNK633 (UG/G)	90085 0					IL	

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300 PROJECT NAME SECTION 36 RMA
FIELD GROUP: 3617W PROJECT MANAGER: BILL FRASER
PARAMETERS: ALL SAMPLES: ALL FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3065Z 505672	BLK 505680	BLK 505681	BLK 505690	BLK 505691	BLK 505692
DATE		06/26/85	6/25/85	7/1/85	06/27/85	06/27/85	06/27/85
TIME		1428	0	0	0	0	0
UNK634 (UG/G)	90086 0					IL	
UNK544 (UG/G)	90026 0					IL	
UNK629 (UG/G)	90082 0	1.02				IL	
UNK604 (UG/G)	90061 0					IL	
UNK621 (UG/G)	90075 0					IL	
UNK596 (UG/G)	90055 0					IL	
UNK601 (UG/G)	90058 0					IL	
UNK606 (UG/G)	90063 0					IL	
UNK612 (UG/G)	90068 0					IL	
UNK613 (UG/G)	90069 0					IL	
UNK617 (UG/G)	90072 0					IL	
UNK622 (UG/G)	90076 0					IL	
UNK608 (UG/G)	90065 0						
UNK615 (UG/G)	90071 0						
UNK614 (UG/G)	90070 0	0.508		* 1.82			
UNK635 (UG/G)	90087 0						
UNK602 (UG/G)	90059 0						
UNK545 (UG/G)	90027 0					2.76	
UNK523 (UG/G)	90092 0		* 0.286				
UNK611 (UG/G)	90067 0						

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617W
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RM4
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 30657 505672	BLK 505680	BLK 505681	BLK 505690	BLK 505691	BLK 505692
DATE		06/26/85	6/25/85	7/1/85	06/27/85	06/27/85	06/27/85
TIME		1428	0	0	0	0	0
UNK619 (UG/G)	90105						
	0						
UNK637 (UG/G)	90089						
	0						
UNK654 (UG/G)	90113						
	0						
UNK631 (UG/G)	90083						
	0						
UNK636 (UG/G)	90088						
	0						
UNK641 (UG/G)	90107						
	0						
UNK530 (UG/G)	90019						
	0						
UNK554 (UG/G)	90096						
	0						
UNK555 (UG/G)	90097						
	0						

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3071A 505700	3071B 505701	3072A 505706	3072B 505707	3073A 505712	3073B 505713	3074A 505718	3074B 505719	3075A 505724	3075B 505725
DATE		7/1/85	7/1/85	07/03/85	07/03/85	7/8/85	7/8/85	07/02/85	07/02/85	7/8/85	7/8/85
TIME		1421	1445	721	732	735	749	1408	1422	829	848
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99758 0	0	122	0	122	0	122	0	122	0	122
SITE TYPE 1	99759 0	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	S	S	S	S	S	S	S	S	S	S
MOISTURE(%WET WT)	70320 0	5.5	3.7	8.1	4.4	5.3	13.4	9.5	4.5	3.0	4.8
CADMIUM,SED (UG/G-DRY)	1028 0	<0.9	<0.9	<0.5	<0.5	<0.9	<0.9	<0.5	<0.5	<0.9	<0.9
CR,SOIL (UG/G-DRY)	99584 0	8	<7	14	10	12	<7	15	10	7	8
COPPER,SED (UG/G-DRY)	1043 0	6	5	13	9	12	13	13	10	6	8
LEAD,SED (UG/G-DRY)	1052 0	<17	<17	<16	<16	33	<17	<16	<16	<17	<17
ZINC,SED (UG/G-DRY)	1093 0	28	29	39	<28	51	37	42	31	30	39
ARSENIC,SED (UG/G-DRY)	1003 0	<4.7	<4.7	<5.2	<5.2	5.1	5.1	<5.2	<5.2	<4.7	<4.7
MERCURY,SED (UG/G-DRY)	71921 0	<0.05	0.06	<0.07	<0.07	0.08	0.05	<0.07	<0.07	<0.05	0.07
ALDRIN,SED (UG/G-DRY)	98356 0	<0.900	<0.900	<0.500	<0.500	<0.900	<0.900	<0.500	<0.500	<0.900	<0.900
DIELDRIN(UG/G-DRY)	98365 0	<0.300	<0.300	<0.600	<0.600	0.322	<0.300	<0.600	<0.600	<0.300	<0.300
DDT,PP'(UG/G-DRY)	98364 0	<0.400	<0.400	<2.00	<2.00	<0.400	<0.400	<2.00	<2.00	<0.400	<0.400
ENDRIN (UG/G-DRY)	98369 0	<0.700	<0.700	<4.00	<4.00	<0.700	<0.700	<4.00	<4.00	<0.700	<0.700
CHLORDANE,SED(UG/G-DRY)	98361 0	<1.00	<1.00	<6.00	<6.00	<1.00	<1.00	<6.00	<6.00	<1.00	<1.00
DDE,PP'(UG/G-DRY)	98363 0	<0.300	<0.300	<0.500	<0.500	<0.300	<0.300	<0.500	<0.500	<0.300	<0.300
1,4 OXATHIANE (UG/G-	98644	<0.300	<0.300	<0.500	<0.500	<0.300	<0.300	<0.500	<0.500	<0.300	<0.300

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3071A 505700	3071B 505701	3072A 505706	3072B 505707	3073A 505712	3073B 505713	3074A 505718	3074B 505719	3075A 505724	3075B 505725
DATE		7/1/85	7/1/85	07/03/85	07/03/85	7/8/85	7/8/85	07/02/85	07/02/85	7/8/85	7/8/85
TIME		1421	1445	721	732	735	749	1408	1422	829	848
DIMP (UG/G-DRY)	98645 0	<0.500	<0.500	<3.00	<3.00	<0.500	<0.500	<3.00	<3.00	<0.500	<0.500
DICHLORVOS (UG/G-DRY)	98646 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
HEXACLCYFENDI (UG/G-DRY)	98647 0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MALATHION (UG/G-DRY)	98648 0	<0.600	<0.600	<2.00	<2.00	<0.600	<0.600	<2.00	<2.00	<0.600	<0.600
ISODRIN (UG/G-DRY)	98649 0	<0.300	<0.300	<0.600	<0.600	<0.300	<0.300	<0.600	<0.600	<0.300	<0.300
1,4 DITHIANE (UG/G-DRY)	98650 0	<0.300	<0.300	<2.00	<2.00	<0.300	<0.300	<2.00	<2.00	<0.300	<0.300
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<0.300	<0.300	<6.00	<6.00	<0.300	<0.300	<6.00	<6.00	<0.300	<0.300
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<0.400	<0.400	<1.00	<1.00	<0.400	<0.400	<1.00	<1.00	<0.400	<0.400
ATRAZINE (UG/G-DRY)	98655 0	<0.700	<0.700	<0.500	<0.500	<0.700	<0.700	<0.500	<0.500	<0.700	<0.700
SUPONA (UG/G-DRY)	98656 0	<0.500	<0.500	<0.900	<0.900	<0.500	<0.500	<0.900	<0.900	<0.500	<0.500
DMMP (UG/G-DRY)	98657 0	<2.00	<2.00	<3.00	<3.00	<2.00	<2.00	<3.00	<3.00	<2.00	<2.00
ETT*PARATHION (UG/G-DRY)	98658 0	<0.700	<0.700	<2.00	<2.00	<0.700	<0.700	<2.00	<2.00	<0.700	<0.700
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZENE (UG/G-DRY)	98681 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROFORM (UG/G-DRY)	98682 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE (UG/G-DRY)	98683 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE (UG/G-DRY)	98684 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3071A 505700	3071B 505701	3072A 505706	3072B 505707	3073A 505712	3073B 505713	3074A 505718	3074B 505719	3075A 505724	3075B 505725
DATE		7/1/85	7/1/85	07/03/85	07/03/85	7/8/85	7/8/85	07/02/85	07/02/85	7/8/85	7/8/85
TIME		1421	1445	721	732	735	749	1408	1422	829	848
TRANS-1,2-DICHLORDET ENE(UG/G-D	98687 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE (UG/G-DRY)	98688 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE (UG/G-DRY)	98689 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLORDETHENE (UG/G-DRY)	98690 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOLUENE (UG/G-DRY)	98691 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLORDETHAN E(UG/G-D)	98692 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLORDETHAN E(UG/G-D)	98693 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRICHLORDETHENE (UG/G-DRY)	98694 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
M-XYLENE (UG/G-DRY)	98695 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MIBK (UG/G-DRY)	98696 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DMDS (UG/G-DRY)	98697 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZENE (UG/G-DRY)	98699 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCPMSD2 UG/G-DRY	98703 0	<0.300	<0.300	<0.400	<0.400	<0.300	<0.300	<0.400	<0.400	<0.300	<0.300
COORDINATE,N/S(STP)	98392 0	183572	183572	183720	183720	183720	183720	183875	183875	183847	183847
COORDINATE,E/W(STP)	98393 0	2187699	2187699	2187552	2187552	2186949	2186949	2187407	2187407	2186801	2186801
UNK633 (UG/G)	90085 0			0.435							
UNK635 (UG/G)	90087 0			0.871				0.332	0.733		
UNK542 (UG/G)	90024 0							0.221			
UNK629 (UG/G)	90082 0							1.99			

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3071A 505700	3071B 505701	3072A 505706	3072B 505707	3073A 505712	3073B 505713	3074A 505718	3074B 505719	3075A 505724	3075B 505725
DATE		7/1/85	7/1/85	07/03/85	07/03/85	7/8/85	7/8/85	07/02/85	07/02/85	7/8/85	7/8/85
TIME		1421	1445	721	732	735	749	1408	1422	829	848
UNK631 (UG/G)	90083 0				0.628						
UNK533 (UG/G)	90021 0										
UNK609 (UG/G)	90066 0										
UNK513 (UG/G)	90116 0	* 0.781									
UNK530 (UG/G)	90019 0	* 6.47									
UNK555 (UG/G)	90097 0	* 9.78									
UNK614 (UG/G)	90070 0	* 13.6	* 2.26			* 1.04					
UNK523 (UG/G)	90092 0						* 2.46			* 1.21	
UNK567 (UG/G)	90036 0					* 0.898					
UNK575 (UG/G)	90121 0					* 0.951					
UNK618 (UG/G)	90073 0					* 1.46					
UNK619 (UG/G)	90105 0					* 3.14					
UNK637 (UG/G)	90069 0										
UNK538 (UG/G)	90123 0										

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # METHOD #	SAMPLE NUMBERS 3076A 505730	3076B 505731	3077A 505736	3077B 505737	3078A 505742	3078B 505743	3079A 505748	3079B 505749	3080A 505754	3080B 505755
DATE		7/10/85	7/10/85	7/10/85	7/10/85	7/9/85	7/9/85	7/10/85	7/10/85	7/2/85	7/2/85
TIME		830	815	713	727	844	900	847	902	734	747
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99756 0	0	122	0	122	0	122	0	122	0	122
SITE TYPE 1	99759 0	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	S	S	S	S	S	S	S	S	S	S
MOISTURE(%WET WT)	70320 0	2.1	12.5	5.3	11.7	1.5	9.7	4.4	3.7	6.7	4.8
CADMIUM,SED (UG/G-DRY)	1028 0	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9
CR,SOIL (UG/G-DRY)	99584 0	12	10	9	8	<7	8	10	9	<7	<7
COPPER,SED (UG/G-DRY)	1043 0	30	8	10	6	6	6	8	7	6	6
LEAD,SED (UG/G-DRY)	1052 0	30	<17	23	<17	<17	<17	18	<17	<17	<17
ZINC,SED (UG/G-DRY)	1093 0	60	44	41	32	26	35	38	38	34	30
ARSENIC,SED (UG/G-DRY)	1003 0	27	<4.7	11	11	8.9	<4.7	5.0	<4.7	<4.7	<4.7
MERCURY,SED (UG/G-DRY)	71921 0	0.59	0.07	0.20	<0.05	<0.05	<0.05	<0.05	0.23	<0.05	<0.05
ALDRIN,SED (UG/G-DRY)	98356 0	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900
DIELDRIN(UG/G-DRY)	98365 0	3.22	<0.300	0.967	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
DDT,PP'(UG/G-DRY)	98364 0	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400
ENDRIN (UG/G-DRY)	93369 0	0.916	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
CHLORDANE,SED(UG/G-DRY)	98361 0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
DDE,PP'(UG/G-DRY)	98363 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3076A 505730	3076B 505731	3077A 505736	3077B 505737	3078A 505742	3078B 505743	3079A 505748	3079B 505749	3080A 505754	3080B 505755
DATE		1/10/85	1/10/85	1/10/85	1/10/85	1/9/85	1/9/85	1/10/85	1/10/85	1/2/85	1/2/85
TIME		800	815	713	727	844	900	847	902	734	747
DIMP (UG/G-DRY)	98645 0	<0.500	2.12	<0.500	<0.500	<0.500	3.52	<0.500	<0.500	<0.500	<0.500
DICHLORVOS (UG/G-DRY)	98646 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
HEXCLCYPENDI (UG/G-DRY)	98647 0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MALATHION (UG/G-DRY)	98648 0	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600
ISODRIN (UG/G-DRY)	98649 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
1,4 DITHIANE (UG/G-DRY)	98650 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400
ATRAZINE (UG/G-DRY)	98655 0	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
SUPONA (UG/G-DRY)	98656 0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
DMMP (UG/G-DRY)	98657 0	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
ETY*PARATHION (UG/G-DRY)	98658 0	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLORUBENZENE (UG/G-DRY)	98681 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROFORM (UG/G-DRY)	98682 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE (UG/G-DRY)	98683 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE (UG/G-DRY)	98684 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # METHOD #	SAMPLE NUMBERS 3076A 505730	3076B 505731	3077A 505736	3077B 505737	3078A 505742	3078B 505743	3079A 505748	3079B 505749	3080A 505754	3080B 505755
DATE		7/10/85	7/10/85	7/10/85	7/10/85	7/9/85	7/9/85	7/10/85	7/10/85	7/2/85	7/2/85
TIME		800	815	713	727	844	900	847	902	734	747
TRANS-1,2-DICHLORDET ENE(UG/G-D	98687 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE (UG/G-DRY)	98688 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE (UG/G-DRY)	98689 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLORDETHENE (UG/G-DRY)	98690 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOLUENE (UG/G-DRY)	98691 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLORDETHAN E(UG/G-D)	98692 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLORDETHAN E(UG/G-D)	98693 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRICHLORDETHENE (UG/G-DRY)	98694 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
M-XYLENE (UG/G-DRY)	98695 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MIBK (UG/G-DRY)	98696 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DMDS (UG/G-DRY)	98697 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZENE (UG/G-DRY)	98699 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCPMSO2 UG/G-DRY	98703 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
COORDINATE,N/S(STP)	98392 0	183868	183868	183723	183723	184001	184001	184025	184025	184023	184023
COORDINATE,E/W(STP)	98393 0	2186200	2186200	2185903	2185903	2185793	2185793	2186346	2186346	2186952	2186952
UNK633 (UG/G)	90085 0										
UNK635 (UG/G)	90087 0										
UNK542 (UG/G)	90024 0										
UNK629 (UG/G)	90082 0										

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3076A 505730	3076B 505731	3077A 505736	3077B 505737	3078A 505742	3078B 505743	3079A 505748	3079B 505749	3080A 505754	3080B 505755
DATE		7/10/85	7/10/85	7/10/85	7/10/85	7/9/85	7/9/85	7/10/85	7/10/85	7/2/85	7/2/85
TIME		800	815	713	727	844	900	847	902	734	747
UNK631 (UG/G)	90083 0										
UNK533 (UG/G)	90021 0										
UNK609 (UG/G)	90066 0										
UNK513 (UG/G)	90116 0										
UNK530 (UG/G)	90019 0										
UNK555 (UG/G)	90097 0										
UNK614 (UG/G)	90070 0			* 4.01		* 1.49				* 3.26	
UNK523 (UG/G)	90092 0										
UNK567 (UG/G)	90036 0										
UNK575 (UG/G)	90121 0										
UNK618 (UG/G)	90073 0										
UNK619 (UG/G)	90105 0										
UNK637 (UG/G)	90089 0						* 8.50				
UNK536 (UG/G)	90123 0							* 1.05			

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3080C 505756	3080D 505757	3081A 505760	3081B 505761	3082A 505766	3082B 505767	BLK 505780	BLK 505781	BLK 505782	BLK 505783
DATE		7/2/85	7/2/85	07/02/85	07/02/85	7/2/85	7/2/85	7/1/85	7/8/85	7/10/85	7/9/85
TIME		811	833	1252	1313	953	1006	0	0	0	0
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99758 0	274	427	0	122	0	122	0	0	0	0
SITE TYPE 1	99759 0	BORE	BORE	BORE	BORE	BORE	BORE	QCMB	QCMB	QCMB	QCMB
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	S	S	S	S	S	S	G	G	G	G
MOISTURE(WET WT)	70320 0	8.1	20.5	4.6	8.5	5.1	5.5	2.0	2.0	2.0	2.0
CADMIUM,SED (UG/G-DRY)	1028 0	1.0	<0.9	0.7	<0.5	<0.9	<0.9	NA	NA	NA	NA
CR,SOIL (UG/G-DRY)	99564 0	9	<7	14	13	<7	12			NA	NA
COPPER,SED (UG/G-DRY)	1043 0	9	36	15	12	5	8			NA	NA
LEAD,SED (UG/G-DRY)	1052 0	<17	18	19	<16	<17	17			NA	NA
ZINC,SED (UG/G-DRY)	1093 0	38	66	39	39	35	48			NA	NA
ARSENIC,SED (UG/G-DRY)	1003 0	<4.7	<4.7	<5.2	<5.2	<4.7	5.7			NA	NA
MERCURY,SED (UG/G-DRY)	71921 0	<0.05	0.06	<0.07	<0.07	<0.05	<0.05			NA	NA
ALDRIN,SED (UG/G-DRY)	98356 0	<0.900	<0.900	<0.500	<0.500	<0.900	<0.900	<0.900	<0.900		
DIELDRIN(UG/G-DRY)	98365 0	<0.300	<0.300	<0.600	<0.600	<0.300	<0.300	<0.300	<0.300		
DDT,PP'(UG/G-DRY)	98364 0	<0.400	<0.400	<2.00	<2.00	<0.400	<0.400	<0.400	<0.400		
ENDRIN (UG/G-DRY)	98369 0	<0.700	<0.700	<4.00	<4.00	<0.700	<0.700	<0.700	<0.700		
CHLORDANE,SED(UG/G-DRY)	98361 0	<1.00	<1.00	<6.00	<6.00	<1.00	<1.00	<1.00	<1.00		
DDE,PP'(UG/G-DRY)	98363 0	<0.300	<0.300	<0.500	<0.500	<0.300	<0.300	<0.300	<0.300		
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.300	<0.300	<0.500	<0.500	<0.300	<0.300	<0.300	<0.300		

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3080C 505756	3080D 505757	3081A 505760	3081B 505761	3082A 505766	3082B 505767	BLK 505780	BLK 505781	BLK 505782	BLK 505783
DATE		7/2/85	7/2/85	07/02/85	07/02/85	7/2/85	7/2/85	7/1/85	7/8/85	7/10/85	7/9/85
TIME		811	833	1252	1313	953	1006	0	0	0	0
DIMP (UG/G-DRY)	98645 0	<0.500	<0.500	<3.00	<3.00	<0.500	<0.500	<0.500	<0.500		
DICHLORVOS (UG/G-DRY)	98646 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300		
HEXACLOROPENDI (UG/G-DRY)	98647 0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00		
MALATHION (UG/G-DRY)	98648 0	<0.600	<0.600	<2.00	<2.00	<0.600	<0.600	<0.600	<0.600		
ISODRIN (UG/G-DRY)	98649 0	<0.300	<0.300	<0.600	<0.600	<0.300	<0.300	<0.300	<0.300		
1,4 DITHIANE (UG/G-DRY)	96650 0	<0.300	<0.300	<2.00	<2.00	<0.300	<0.300	<0.300	<0.300		
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<0.300	<0.300	<6.00	<6.00	<0.300	<0.300	<0.300	<0.300		
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300		
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<0.400	<0.400	<1.00	<1.00	<0.400	<0.400	<0.400	<0.400		
ATRAZINE (UG/G-DRY)	98655 0	<0.700	<0.700	<0.500	<0.500	<0.700	<0.700	<0.700	<0.700		
SUPONA (UG/G-DRY)	98656 0	<0.500	<0.500	<0.900	<0.900	<0.500	<0.500	<0.500	<0.500		
DMMP (UG/G-DRY)	98657 0	<2.00	<2.00	<3.00	<3.00	<2.00	<2.00	<2.00	<2.00		
ETY*PARATHION (UG/G-DRY)	98658 0	<0.700	<0.700	<2.00	<2.00	<0.700	<0.700	<0.700	<0.700		
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
CHLOROBENZENE (UG/G-DRY)	98681 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
CHLOROFORM (UG/G-DRY)	98682 0	<0.300	<0.300	NA	NA	NA	NA	0.945			
1,1-DICHLOROETHANE (UG/G-DRY)	98683 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
1,2-DICHLOROETHANE (UG/G-DRY)	98684 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3080C 505756	3080D 505757	3081A 505760	3081B 505761	3082A 505766	3082B 505767	BLK 505780	BLK 505781	BLK 505782	BLK 505783
DATE		7/2/85	7/2/85	07/02/85	07/02/85	7/2/85	7/2/85	7/1/85	7/8/85	7/10/85	7/9/85
TIME		811	833	1252	1313	953	1006	0	0	0	0
TRANS-1,2-DICHLORUET ENE(UG/G-D	98687 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
ETHYLBENZENE (UG/G-DRY)	98688 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
METHYLENE CHLORIDE (UG/G-DRY)	98689 0	<0.300	<0.300	NA	NA	NA	NA	0.903			
TETRACHLORUETHENE (UG/G-DRY)	98690 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
TOLUENE (UG/G-DRY)	98691 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
1,1,1-TRICHLORUETHAN E(UG/G-D)	98692 0	<0.300	<0.300	NA	NA	NA	NA	0.555			
1,1,2-TRICHLORUETHAN E(UG/G-D)	98693 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
TRICHLORUETHENE (UG/G-DRY)	98694 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
M-XYLENE (UG/G-DRY)	98695 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
MIBK (UG/G-DRY)	98696 0	<0.500	<0.500	NA	NA	NA	NA	<0.500			
DMDS (UG/G-DRY)	98697 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
BENZENE (UG/G-DRY)	98699 0	<0.300	<0.300	NA	NA	NA	NA	<0.300			
O-AND/OR P-XYLENE (UG/G-DRY)	93700 0	<0.500	<0.500	NA	NA	NA	NA	<0.500			
PCPMSG2 UG/G-DRY	95703 0	<0.300	<0.300	<0.400	<0.400	<0.300	<0.300	<0.300	<0.300		
COORDINATE,N/S(STP)	98392 0	184023	184023	184017	184017	184168	184168				
COORDINATE,E/W(STP)	98393 0	2186952	2186952	2187556	2187556	2187099	2187099				
UNK633 (UG/G)	90085 0			0.314	0.437						
UNK635 (UG/G)	90087 0			0.419	0.765						
UNK542 (UG/G)	90024 0										
UNK629 (UG/G)	90082 0										

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3080C 505756	3080D 505757	3081A 505760	3081B 505761	3082A 505766	3082B 505767	BLK 505780	BLK 505781	BLK 505782	BLK 505783
DATE		7/2/85	7/2/85	07/02/85	07/02/85	7/2/85	7/2/85	7/1/85	7/8/85	7/10/85	7/9/85
TIME		811	833	1252	1313	953	1006	0	0	0	0
UNK631 (UG/G)	90083 0										
UNK533 (UG/G)	90021 0										
UNK609 (UG/G)	90066 0					* 1.11					
UNK513 (UG/G)	90116 0										
UNK530 (UG/G)	90019 0										
UNK555 (UG/G)	90097 0										
UNK614 (UG/G)	90070 0		* 2.63			* 13.5	* 19.3	* 1.21			
UNK523 (UG/G)	90092 0							* 1.56			
UNK567 (UG/G)	90036 0										
UNK575 (UG/G)	90121 0										
UNK618 (UG/G)	90073 0										
UNK619 (UG/G)	90105 0										
UNK637 (UG/G)	90089 0										
UNK538 (UG/G)	90123 0										

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86

STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

SAMPLE NUMBERS

PARAMETERS	STORET # / METHOD #	BLK 505790	BLK 505791	BLK 505792
DATE		07/02/85	07/02/85	07/02/85
TIME		0	0	0
SAMPLE TYPE	71999 0	SO	SO	SO
SAMPLE DEPTH(CM)	99758 0	0	0	0
SITE TYPE 1	99759 0	QCMB	QCMB	QCMB
INSTALLATION CODE	99720 0	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	G	G	G
MOISTURE(%WET WT)	70320 0	2.0	2.0	2.0
CADMIUM,SED (UG/G-DRY)	1028 0	NA	NA	NA
CR,SOIL (UG/G-DRY)	99584 0			
COPPER,SED (UG/G-DRY)	1043 0			
LEAD,SED (UG/G-DRY)	1052 0			
ZINC,SED (UG/G-DRY)	1093 0			
ARSENIC,SED (UG/G-DRY)	1003 0			
MERCURY,SED (UG/G-DRY)	71921 0	<0.07		
ALDRIN,SED (UG/G-DRY)	98356 0	<0.500		
DIELDRIN(UG/G-DRY)	98365 0	<0.600		
DDT,PP'(UG/G-DRY)	98364 0	<2.00		
ENDRIN (UG/G-DRY)	98369 0	<4.00		
CHLORDANE,SED(UG/G-DRY)	98361 0	<6.00		
DDE,PP'(UG/G-DRY)	98363 0	<0.500		
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.500		

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86

STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

SAMPLE NUMBERS

PARAMETERS	STORET # / METHOD #	BLK 505790	BLK 505791	BLK 505792
DATE		07/02/85	07/02/85	07/02/85
TIME		0	0	0
DIMP (UG/G-DRY)	98645 0	<3.00		
DICHLORVOS (UG/G-DRY)	98646 0	<0.300		
HEXCLCYPENDI (UG/G-DRY)	98647 0	<1.00		
MALATHION (UG/G-DRY)	98648 0	<2.00		
ISODRIN (UG/G-DRY)	98649 0	<0.600		
1,4 DITHIANE (UG/G-DRY)	98650 0	<2.00		
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<6.00		
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005		
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300		
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<1.00		
ATRAZINE (UG/G-DRY)	98655 0	<0.500		
SUPONA (UG/G-DRY)	98656 0	<0.900		
DMMP (UG/G-DRY)	98657 0	<3.00		
ETY*PARATHION (UG/G-DRY)	98658 0	<2.00		
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0			
CHLOROBENZENE (UG/G-DRY)	98681 0			
CHLOROFORM (UG/G-DRY)	98682 0			
1,1-DICHLOROETHANE (UG/G-DRY)	98683 0			
1,2-DICHLOROETHANE (UG/G-DRY)	98684 0			
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0			

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86

STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

SAMPLE NUMBERS

PARAMETERS	STORET # / METHOD #	BLK 505790	BLK 505791	BLK 505792
DATE		07/02/85	07/02/85	07/02/85
TIME		0	0	0
TRANS-1,2-DICHLOROETHENE(UG/G-D	98687 0			
ETHYLBENZENE (UG/G-DRY)	98688 0			
METHYLENE CHLORIDE (UG/G-DRY)	98689 0			
TETRACHLOROETHENE (UG/G-DRY)	98690 0			
TOLUENE (UG/G-DRY)	98691 0			
1,1,1-TRICHLOROETHANE(UG/G-D)	98692 0			
1,1,2-TRICHLOROETHANE(UG/G-D)	98693 0			
TRICHLOROETHENE (UG/G-DRY)	98694 0			
M-XYLENE (UG/G-DRY)	98695 0			
MIBK (UG/G-DRY)	98696 0			
DMDS (UG/G-DRY)	98697 0			
BENZENE (UG/G-DRY)	98699 0			
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0			
PCPMSU2 UG/G-DRY	98793 0	<0.400		
COORDINATE,N/S(STP)	98392 0			
COORDINATE,E/W(STP)	98393 0			
UNK633 (UG/G)	90085 0			
UNK635 (UG/G)	90087 0	0.918		
UNK542 (UG/G)	90024 0			
UNK629 (UG/G)	90082 0			

ENVIRONMENTAL SCIENCE & ENGINEERING 01/27/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617X
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

SAMPLE NUMBERS

PARAMETERS	STORET # / METHOD #	BLK 505790	BLK 505791	BLK 505792
DATE		07/02/85	07/02/85	07/02/85
TIME		0	0	0
UNK631 (UG/G)	90083 0			
UNK533 (UG/G)	90021 0	1.22		
UNK609 (UG/G)	90066 0			
UNK513 (UG/G)	90116 0			
UNK530 (UG/G)	90019 0			
UNK555 (UG/G)	90097 0			
UNK614 (UG/G)	90070 0			
UNK523 (UG/G)	90092 0			
UNK567 (UG/G)	90036 0			
UNK575 (UG/G)	90121 0			
UNK618 (UG/G)	90073 0			
UNK619 (UG/G)	90105 0			
UNK637 (UG/G)	90089 0			
UNK538 (UG/G)	90123 0			

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3083A 505800	3083B 505801	3083C 505802	3083D 505803	3083E 505804	3084A 505806	3084B 505807	3084C 505808	3084D 505809	3085A 505812
DATE		07/03/85	07/03/85	07/03/85	07/03/85	07/03/85	7/9/85	7/9/85	7/9/85	7/9/85	7/9/85
TIME		813	826	844	906	946	1009	1027	1049	1137	724
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99758 0	0	122	274	427	579	0	122	274	427	0
SITE TYPE 1	99759 0	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	S	S	S	S	S	S	S	S	S	S
MOISTURE(WET WT)	70320 0	6.3	5.5	6.4	12.7	20.2	3.0	3.6	7.0	16.3	8.7
CADMIUM,SED (UG/G-DRY)	1028 0	6.9	<0.5	<0.5	<0.5	<0.5	<0.9	<0.9	<0.9	<0.9	<0.9
CR,SOIL (UG/G-DRY)	99584 0	16	14	14	15	12	8	9	9	<7	14
COPPER,SED (UG/G-DRY)	1043 0	14	13	15	15	22	5	5	6	5	17
LEAD,SED (UG/G-DRY)	1052 0	20	<16	<16	<16	<16	<17	<17	<17	<17	32
ZINC,SED (UG/G-DRY)	1093 0	48	39	44	50	51	27	31	34	36	65
ARSENIC,SED (UG/G-DRY)	1003 0	<5.2	<5.2	<5.2	<5.2	<5.2	<4.7	<4.7	<4.7	<4.7	7.8
MERCURY,SED (UG/G-DRY)	71921 0	0.36	<0.07	<0.07	<0.07	<0.07	<0.05	<0.05	<0.05	<0.05	0.06
ALDRIN,SED (UG/G-DRY)	98356 0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.900	<0.900	<0.900	<0.900	<0.900
DIELDRIN(UG/G-DRY)	98365 0	<0.600	<0.600	<0.600	<0.600	<0.600	<0.300	<0.300	<0.300	<0.300	<0.300
DDT,PP'(UG/G-DRY)	98364 0	<2.00	<2.00	<2.00	<2.00	<2.00	<0.400	<0.400	<0.400	<0.400	<0.400
ENDRIN (UG/G-DRY)	98369 0	<4.00	<4.00	<4.00	<4.00	<4.00	<0.700	<0.700	<0.700	<0.700	<0.700
CHLORDANE,SED(UG/G-DRY)	98361 0	<6.00	<6.00	<6.00	<6.00	<6.00	<1.00	<1.00	<1.00	<1.00	<1.00
DDE,PP'(UG/G-DRY)	98363 0	2.87	<0.500	<0.500	<0.500	<0.500	<0.300	<0.300	<0.300	<0.300	<0.300
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.300	<0.300	<0.300	<0.300	<0.300

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3083A 505800	3083B 505801	3083C 505802	3083D 505803	3083E 505804	3084A 505806	3084B 505807	3084C 505808	3084D 505809	3085A 505812
DATE		07/03/85	07/03/85	07/03/85	07/03/85	07/03/85	7/9/85	7/9/85	7/9/85	7/9/85	7/9/85
TIME		813	826	844	906	946	1009	1027	1049	1137	124
DIMP (UG/G-DRY)	98645 0	<3.00	<3.00	<3.00	<3.00	<3.00	<0.500	<0.500	<0.500	<0.500	<0.500
DICHLORVOS (UG/G-DRY)	98646 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
HEXCLCYPENDI (UG/G-DRY)	98647 0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MALATHION (UG/G-DRY)	98648 0	<2.00	<2.00	<2.00	<2.00	<2.00	<0.600	<0.600	<0.600	<0.600	<0.600
ISODRIN (UG/G-DRY)	98649 0	<0.600	<0.600	<0.600	<0.600	<0.600	<0.300	<0.300	<0.300	<0.300	<0.300
1,4 DITHIANE (UG/G-DRY)	98650 0	<2.00	<2.00	<2.00	<2.00	<2.00	<0.300	<0.300	<0.300	<0.300	<0.300
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<6.00	<6.00	<6.00	<6.00	<6.00	<0.300	<0.300	<0.300	<0.300	<0.300
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<1.00	<1.00	<1.00	<1.00	<1.00	<0.400	<0.400	<0.400	<0.400	<0.400
ATRAZINE (UG/G-DRY)	98655 0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.700	<0.700	<0.700	<0.700	<0.700
SUPONA (UG/G-DRY)	98656 0	<0.900	<0.900	<0.900	<0.900	<0.900	<0.500	<0.500	<0.500	<0.500	<0.500
DMMP (UG/G-DRY)	98657 0	<3.00	<3.00	<3.00	<3.00	<3.00	<2.00	<2.00	<2.00	<2.00	<2.00
ETY*PARATHION (UG/G-DRY)	98658 0	<2.00	<2.00	<2.00	<2.00	<2.00	<0.700	<0.700	<0.700	<0.700	<0.700
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0	NA	NA	NA	NA	<0.400	NA	NA	*<0.300	*<0.300	NA
CHLOROBENZENE (UG/G-DRY)	98681 0	NA	NA	NA	NA	<0.300	NA	NA	*<0.300	*<0.300	NA
CHLOROFORM (UG/G-DRY)	98682 0	NA	NA	NA	NA	<0.700	NA	NA	*<0.300	*<0.300	NA
1,1-DICHLOROETHANE (UG/G-DRY)	98683 0	NA	NA	NA	NA	<0.500	NA	NA	*<0.300	*<0.300	NA
1,2-DICHLOROETHANE (UG/G-DRY)	98684 0	NA	NA	NA	NA	<0.400	NA	NA	*<0.300	*<0.300	NA
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0	NA	NA	NA	NA	<0.600	NA	NA	*<0.300	*<0.300	NA

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3083A 505800	3083B 505801	3083C 505802	3083D 505803	3083E 505804	3084A 505806	3084B 505807	3084C 505808	3084D 505809	3335A 505812
DATE		07/03/85	07/03/85	07/03/85	07/03/85	07/03/85	7/9/85	7/9/85	7/9/85	7/9/85	7/9/85
TIME		813	826	844	906	946	1009	1027	1049	1137	754
TRANS-1,2-DICHLORDET ENE(UG/G-D	98687 0	NA	NA	NA	NA	<0.600	NA	NA	A<0.300	A<0.300	NA
ETHYLBENZENE (UG/G-DRY)	98688 0	NA	NA	NA	NA	<0.400	NA	NA	A<0.300	A<0.300	NA
METHYLENE CHLORIDE (UG/G-DRY)	98689 0	NA	NA	NA	NA		NA	NA	A<0.300	A<0.300	NA
TETRACHLORDETHENE (UG/G-DRY)	98690 0	NA	NA	NA	NA	<0.500	NA	NA	A<0.300	A<0.300	NA
TOLUENE (UG/G-DRY)	98691 0	NA	NA	NA	NA	<0.300	NA	NA	A<0.300	A<0.300	NA
1,1,1-TRICHLORDETHAN E(UG/G-D)	98692 0	NA	NA	NA	NA	<0.500	NA	NA	A<0.300	A<0.300	NA
1,1,2-TRICHLORDETHAN E(UG/G-D)	98693 0	NA	NA	NA	NA	<0.600	NA	NA	A<0.300	A<0.300	NA
TRICHLORDETHENE (UG/G-DRY)	98694 0	NA	NA	NA	NA	<0.600	NA	NA	A<0.300	A<0.300	NA
M-XYLENE (UG/G-DRY)	98695 0	NA	NA	NA	NA	<0.300	NA	NA	A<0.300	A<0.300	NA
MIBK (UG/G-DRY)	98696 0	NA	NA	NA	NA	<0.400	NA	NA	A<0.500	A<0.500	NA
DMDS (UG/G-DRY)	98697 0	NA	NA	NA	NA	<4.00	NA	NA	A<0.300	A<0.300	NA
BENZENE (UG/G-DRY)	98699 0	NA	NA	NA	NA	<1.00	NA	NA	A<0.300	A<0.300	NA
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0	NA	NA	NA	NA	<0.500	NA	NA	A<0.500	A<0.500	NA
PCPMSO2 UG/G-DRY	98703 0	<0.400	<0.400	<0.400	<0.400	<0.400	<0.300	<0.300	<0.300	<0.300	<0.333
COORDINATE,N/S(SIP)	98392 0	184169	184169	184169	184169	184169	184172	184172	184172	184172	184317
COORDINATE,E/W(SIP)	98393 0	2186500	2186500	2186500	2186500	2186500	2185903	2185903	2185903	2185903	2186202
UNK620 (UG/G)	90074 0	2.67	NA	NA	NA						
UNK635 (UG/G)	90087 0	1.39	0.953	0.641	9.17	13.8					
UNK582 (UG/G)	90045 0	1.28									
UNK576 (UG/G)	90040 0	1.17									

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3083A 505800	3083B 505801	3083C 505802	3083D 505803	3083E 505804	3084A 505806	3084B 505807	3084C 505808	3084D 505809	3085A 505812
DATE		07/03/85	07/03/85	07/03/85	07/03/85	07/03/85	7/9/85	7/9/85	7/9/85	7/9/85	7/1/85
TIME		813	826	844	906	946	1009	1027	1049	1137	754
UNK580 (UG/G)	90044 0	0.854									
UNK589 (UG/G)	90050 0	NA	8.47		10.3						
UNK632 (UG/G)	90084 0	NA	0.212		0.458	0.376					
UNK614 (UG/G)	90070 0	NA			0.802	0.376			* 1.74		* 2.36
UNK629 (UG/G)	90082 0					0.376					
UNK579 (UG/G)	90043 0	NA			0.229						
UNK577 (UG/G)	90041 0	NA									
UNK578 (UG/G)	90042 0	NA									
UNK623 (UG/G)	90077 0	NA									
UNK525 (UG/G)	90016 0	NA									
UNK562 (UG/G)	90033 0	NA									
UNK567 (UG/G)	90036 0	NA									
UNK569 (UG/G)	90038 0	NA									
UNK574 (UG/G)	90039 0	NA									
UNK588 (UG/G)	90049 0	NA									
UNK591 (UG/G)	90051 0	NA									
UNK594 (UG/G)	90053 0	NA									
UNK595 (UG/G)	90054 0	NA									
UNK600 (UG/G)	90057 0	NA									
UNK605 (UG/G)	90062 0	NA									

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3083A 505800	3083B 505801	3083C 505802	3083D 505803	3083E 505804	3084A 505806	3084B 505807	3084C 505808	3084D 505809	3085A 505812
DATE		07/03/85	07/03/85	07/03/85	07/03/85	07/03/85	7/9/85	7/9/85	7/9/85	7/9/85	7/9/85
TIME		813	826	844	906	946	1009	1027	1049	1137	724
UNK609 (UG/G)	90066 0	NA									
UNK524 (UG/G)	90015 0	NA									
UNK533 (UG/G)	90021 0										
UNK557 (UG/G)	90031 0	NA									
UNK612 (UG/G)	90068 0										
UNK615 (UG/G)	90071 0										
UNK637 (UG/G)	90089 0										
UNK523 (UG/G)	90092 0							* 1.05			
UNK585 (UG/G)	90102 0										
UNK636 (UG/G)	90088 0										
UNK660 (UG/G)	90120 0										
UNK532 (UG/G)	90020 0										
UNK618 (UG/G)	90073 0										
UNK633 (UG/G)	90085 0										
UNK513 (UG/G)	90116 0								* 0.926	* 1.04	
UNK639 (UG/G)	90122 0									* 5.37	
UNK638 (UG/G)	90090 0										

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3611Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 30858 505813	30886A 505818	30886B 505819	30887A 505824	30887B 505825	30888A 505830	30888B 505831	30889A 505836	30889B 505837	30891 505843
DATE		7/9/85	07/03/85	07/03/85	7/8/85	7/8/85	7/8/85	7/8/85	6/25/85	6/25/85	6/25/85
TIME		741	1101	1117	942	954	1025	1047	1300	1010	1115
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99756 0	122	0	122	0	122	0	122	0	122	0
SITE TYPE 1	99759 0	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	S	S	S	S	S	S	S	S	S	S
MOISTURE(%WET WT)	70320 0	3.5	12.7	25.1	5.3	3.2	4.3	6.6	4.3	16.4	3.1
CADMIUM,SED (UG/G-DRY)	1028 0	<0.9	1.8	12.6	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9
CR,SOIL (UG/G-DRY)	99584 0	8	15	33	<7	8	8	8	11	14	12
COPPER,SED (UG/G-DRY)	1043 0	5	27	172	6	<5	6	5	7	9	8
LEAD,SED (UG/G-DRY)	1052 0	<17	96	150	<17	<17	<17	<17	<17	19	25
ZINC,SED (UG/G-DRY)	1093 0	29	112	2480	27	28	30	31	46	46	44
ARSENIC,SED (UG/G-DRY)	1003 0	<4.7	<5.2	<5.2	<4.7	<4.7	<4.7	<4.7	16	<4.7	<4.7
MERCURY,SED (UG/G-DRY)	71921 0	<0.05	0.13	1.22	<0.05	<0.05	<0.05	<0.05	0.20	<0.05	0.10
ALDRIN,SED (UG/G-DRY)	98356 0	<0.900	<0.500	<50.0	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900
DIELDRIN(UG/G-DRY)	98365 0	<0.300	<0.600	<60.0	<0.300	<0.300	<0.300	<0.300	0.744	<0.300	<0.300
DDT,PP'(UG/G-DRY)	98364 0	<0.400	<2.00	<200	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400
ENDRIN (UG/G-DRY)	98369 0	<0.700	<4.00	<400	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
CHLORDANE,SED(UG/G-DRY)	98361 0	<1.00	<6.00	<600	<1.00	<1.00	<1.00	<1.00	63.2	<1.00	<1.00
DDE,PP'(UG/G-DRY)	98363 0	<0.300	<0.500	<50.0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.300	<0.500	<50.0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3085B 505813	3086A 505818	3086B 505819	3087A 505824	3087B 505825	3088A 505830	3088B 505831	3089A 505836	3089B 505837	3091A 505843
DATE		7/9/85	07/03/85	07/03/85	7/8/85	7/8/85	7/8/85	7/8/85	6/25/85	6/25/85	6/25/85
TIME		741	1101	1117	942	954	1025	1047	1000	1010	1035
DIMP (UG/G-DRY)	98645 0	<0.500	<3.00	<300	<0.500	<0.500	<0.500	<0.500	<0.500	0.740	<0.500
DICHLORVOS (UG/G-DRY)	98646 0	<0.300	<0.300	<30.0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
HEXCLCYPENDI (UG/G-DRY)	98647 0	<1.00	<1.00	<100	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MALATHION (UG/G-DRY)	98648 0	<0.600	<2.00	<200	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600
ISODRIN (UG/G-DRY)	98649 0	<0.300	<0.600	<60.0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
1,4 DITHIANE (UG/G-DRY)	98650 0	<0.300	<2.00	<200	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<0.300	<6.00	<600	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005	0.012	0.135	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300	<0.300	<30.0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<0.400	<1.00	<100	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400
ATRAZINE (UG/G-DRY)	98655 0	<0.700	<0.500	<50.0	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
SUPONA (UG/G-DRY)	98656 0	<0.500	<0.900	<90.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
DMMP (UG/G-DRY)	98657 0	<2.00	<3.00	<300	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
ETY*PARATHION (UG/G-DRY)	98658 0	<0.700	<2.00	<200	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZENE (UG/G-DRY)	98681 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROFORM (UG/G-DRY)	98682 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE (UG/G-DRY)	98683 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE (UG/G-DRY)	98684 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDALL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3085B 505813	3086A 505818	3086B 505819	3087A 505824	3087B 505825	3088A 505830	3088B 505831	3089A 505836	3089B 505837	3091A 505844
DATE		7/9/85	07/03/85	07/03/85	7/8/85	7/8/85	7/8/85	7/8/85	6/25/85	6/25/85	6/25/85
TIME		741	1101	1117	942	959	1025	1047	1000	1010	935
TRANS-1,2-DICHLOROETHENE(UG/G-D	98687 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE (UG/G-DRY)	98688 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE (UG/G-DRY)	98689 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE (UG/G-DRY)	98690 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOLUENE (UG/G-DRY)	98691 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE(UG/G-D)	98692 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROETHANE(UG/G-D)	98693 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRICHLOROETHENE (UG/G-DRY)	98694 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
M-XYLENE (UG/G-DRY)	98695 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MIBK (UG/G-DRY)	98696 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DMDS (UG/G-DRY)	98697 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZENE (UG/G-DRY)	98699 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCPMSOZ UG/G-DRY	98703 0	<0.300	<0.400	<40.0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
COORDINATE,N/S(SIP)	98392 0	184319	184285	184265	184470	184470	184617	184617	182524	182524	182282
COORDINATE,E/W(SIP)	98393 0	2186202	2186800	2186800	2186503	2186503	2186205	2186205	2186502	2186502	2186652
UNK620 (UG/G)	90074 0		NA	NA							
UNK635 (UG/G)	90067 0		2.29	66.8							
UNK582 (UG/G)	90045 0			107							
UNK576 (UG/G)	90040 0			80.1							

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER d4936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 30858 505813	3086A 505818	3086B 505819	3087A 505824	3087B 505825	3088A 505830	3088B 505831	3089A 505836	3089B 505837	3091A 505843
DATE		7/9/85	07/03/85	07/03/85	7/8/85	7/8/85	7/8/85	7/8/85	6/25/85	6/25/85	6/25/85
TIME		741	1101	1117	942	954	1025	1047	1000	1010	835
UNK580 (UG/G)	90044 0			120							
UNK539 (UG/G)	90050 0		11.5								
UNK632 (UG/G)	90084 0										
UNK614 (UG/G)	90070 0						* 1.02	* 0.990	* 1.10		
UNK629 (UG/G)	90082 0										
UNK579 (UG/G)	90043 0									* 0.665	
UNK577 (UG/G)	90041 0		2.29								
UNK578 (UG/G)	90042 0		1.15								
UNK623 (UG/G)	90077 0		0.687								
UNK525 (UG/G)	90016 0			1270							
UNK562 (UG/G)	90033 0			93.5							
UNK567 (UG/G)	90036 0			93.5							
UNK569 (UG/G)	90038 0			66.8							
UNK574 (UG/G)	90039 0			134							
UNK588 (UG/G)	90049 0			107							
UNK591 (UG/G)	90051 0			93.5							
UNK594 (UG/G)	90053 0			40.1							
UNK595 (UG/G)	90054 0			134							
UNK600 (UG/G)	90057 0			66.8							
UNK605 (UG/G)	90062 0			40.1							

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGSOLL

PARAMETERS	STORET # / METHOD #	3085B 505813	3086A 505818	3086B 505819	3087A 505824	3087B 505825	3088A 505830	3088B 505831	3089A 505836	3089B 505837	3091A 505849
SAMPLE NUMBERS											
DATE		7/9/85	07/03/85	07/03/85	7/8/85	7/8/85	7/8/85	7/8/85	6/25/85	6/25/85	6/25/85
TIME		741	1101	1117	942	954	1025	1047	1000	1010	[illegible]
UNK609 (UG/G)	90066 0			26.7					* 1.03		
UNK524 (UG/G)	90015 0										
UNK533 (UG/G)	90021 0										
UNK557 (UG/G)	90031 0										
UNK612 (UG/G)	90068 0								* 0.709		
UNK615 (UG/G)	90071 0								* 2.16		
UNK637 (UG/G)	90089 0				* 11.4				* 0.815		
UNK523 (UG/G)	90092 0					* 2.28	* 2.15			* 0.605	* 0.274
UNK585 (UG/G)	90102 0									* 0.580	
UNK636 (UG/G)	90088 0									* 0.714	* 0.506
UNK660 (UG/G)	90120 0									* 0.408	
UNK532 (UG/G)	90026 0										* [illegible]
UNK618 (UG/G)	90073 0										* 0.442
UNK633 (UG/G)	90085 0										* 0.312
UNK513 (UG/G)	90116 0										
UNK639 (UG/G)	90122 0										
UNK638 (UG/G)	90090 0							* 2.13			

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 30918 505849	3086 505872	BLK 505880	BLK 505881	BLK 505882	BLK 505890	BLK 505891	BLK 505892
DATE		6/25/85	07/03/85	6/25/85	7/8/85	7/9/85	07/03/85	07/03/85	07/03/85
TIME		819	1111	0	0	0	0	0	0
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99758 0	122	61	0	0	0	0	0	0
SITE TYPE 1	99759 0	BORE	BORE	QCMB	QCMB	QCMB	QCMB	QCMB	QCMB
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	S	S	G	G	G	G	G	G
MOISTURE(2MET AT)	70320 0	11.3	18.4	2.3	2.3	2.3	2.0	2.0	2.0
CADMIUM,SED (UG/G-DRY)	1028 0	<0.9	9.6	NA	NA	NA	<0.5	NA	NA
CR,SOIL (UG/G-DRY)	99584 0	11	1450			NA	15		
COPPER,SED (UG/G-DRY)	1043 0	7	657			NA	13		
LEAD,SED (UG/G-DRY)	1052 0	<17	7100			NA	<16		
ZINC,SED (UG/G-DRY)	1093 0	39	11800			NA	37		
ARSENIC,SED (UG/G-DRY)	1003 0	4.9	<5.2			NA	<5.2		
MERCURY,SED (UG/G-DRY)	71921 0	<0.05	<0.07			NA	<0.07		
ALDRIN,SED (UG/G-DRY)	98356 0	<0.900	<50.0				<0.500		
DIELDRIN(UG/G-DRY)	98365 0	<0.300	<60.0				<0.600		
DDT,PP'(UG/G-DRY)	98364 0	<0.400	<200				<2.00		
ENDRIN (UG/G-DRY)	98369 0	<0.700	<400				<4.00		
CHLORDANE,SED(UG/G-DRY)	98361 0	<1.00	<600				<6.00		
DDE,PP'(UG/G-DRY)	98363 0	<0.300	<50.0				<0.500		
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.300	<50.0				<0.500		

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 30918 505849	3086 505872	BLK 505880	BLK 505881	BLK 505882	BLK 505890	BLK 505891	BLK 505892
DATE		6/25/85	07/03/85	6/25/85	7/8/85	7/9/85	07/03/85	07/03/85	07/03/85
TIME		819	1111	0	0	0	0	0	0
DIMP (UG/G-DRY)	98645 0	<0.500	<300				<3.00		
DICHLORVOS (UG/G-DRY)	98646 0	<0.300	<30.0				<0.300		
HEXCLCYPENDI (UG/G-DRY)	98647 0	<1.00	<100				<1.00		
MALATHION (UG/G-DRY)	98648 0	<0.600	<200				<2.00		
ISODRIN (UG/G-DRY)	98649 0	<0.300	<60.0				<0.600		
1,4 DITHIANE (UG/G-DRY)	98650 0	<0.300	<200				<2.00		
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<0.300	<600				<6.00		
DBCP(NEMAGON) (UG/G-DRY)	98652 0	0.031	0.109				<0.005		
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300	<30.0				<0.300		
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<0.400	<100				<1.00		
ATRAZINE (UG/G-DRY)	98655 0	<0.700	<50.0				<0.500		
SUPONA (UG/G-DRY)	98656 0	<0.500	<90.0				<0.900		
DNMP (UG/G-DRY)	98657 0	<2.00	<300				<3.00		
ETY*PARATHION (UG/G-DRY)	98658 0	<0.700	<200				<2.00		
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0	NA	NA	*<0.300			<0.400		
CHLOROBENZENE (UG/G-DRY)	98681 0	NA	NA	*<0.300			<0.300		
CHLOROFORM (UG/G-DRY)	98682 0	NA	NA	* 1.18			<0.700		
1,1-DICHLOROETHANE (UG/G-DRY)	98683 0	NA	NA	*<0.300			<0.500		
1,2-DICHLOROETHANE (UG/G-DRY)	98684 0	NA	NA	*<0.300			<0.400		
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0	NA	NA	*<0.300			<0.800		

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 30918 505849	3086 505872	BLK 505880	BLK 505881	BLK 505882	BLK 505890	BLK 505891	BLK 505892
DATE		6/25/85	07/03/85	6/25/85	7/8/85	7/9/85	07/03/85	07/03/85	07/03/85
TIME		819	1111	0	0	0	0	0	0
TRANS-1,2-DICHLORDET ENE(UG/G-D	98687 0	NA	NA	*<0.300			<0.600		
ETHYLBENZENE (UG/G-DRY)	98688 0	NA	NA	*<0.300			<0.400		
METHYLENE CHLORIDE (UG/G-DRY)	98689 0	NA	NA	* 0.869					
TETRACHLORDETHENE (UG/G-DRY)	98690 0	NA	NA	*<0.300			<0.500		
TOLUENE (UG/G-DRY)	98691 0	NA	NA	*<0.300			<0.300		
1,1,1-TRICHLORDETHAN E(UG/G-D)	98692 0	NA	NA	* 0.760			<0.500		
1,1,2-TRICHLORDETHAN E(UG/G-D)	98693 0	NA	NA	*<0.300			<0.600		
TRICHLORDETHENE (UG/G-DRY)	98694 0	NA	NA	*<0.300			<0.600		
M-XYLENE (UG/G-DRY)	98695 0	NA	NA	*<0.300			<0.300		
MIBK (UG/G-DRY)	98696 0	NA	NA	*<0.500			<0.400		
DMDS (UG/G-DRY)	98697 0	NA	NA	*<0.300			<4.00		
BENZENE (UG/G-DRY)	98699 0	NA	NA	*<0.300			<1.00		
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0	NA	NA	*<0.500			<0.500		
PCPMS02 UG/G-DRY	98703 0	<0.300	<40.0				<0.400		
COORDINATE,N/S(SIP)	98392 0	182222	184285						
COORDINATE,E/W(SIP)	98393 0	2186652	2186800						
UNK620 (UG/G)	90074 0		NA						
UNK635 (UG/G)	90087 0						1.02		
UNK582 (UG/G)	90045 0		270						
UNK576 (UG/G)	90040 0		294						

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936360
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 30918 505849	3086 505872	BLK 505880	BLK 505881	BLK 505882	BLK 505890	BLK 505891	BLK 505892
DATE		6/25/85	07/03/85	6/25/85	7/8/85	7/9/85	07/03/85	07/03/85	07/03/85
TIME		819	1111	0	0	0	0	0	0
UNK580 (UG/G)	90044 0		270						
UNK589 (UG/G)	90050 0						10.2		
UNK632 (UG/G)	90084 0								
UNK614 (UG/G)	90070 0								
UNK629 (UG/G)	90082 0								
UNK579 (UG/G)	90043 0	* 0.374							
UNK577 (UG/G)	90041 0								
UNK578 (UG/G)	90042 0								
UNK623 (UG/G)	90077 0								
UNK525 (UG/G)	90016 0						1.02		
UNK562 (UG/G)	90033 0		184						
UNK567 (UG/G)	90036 0		196						
UNK569 (UG/G)	90038 0		196						
UNK574 (UG/G)	90039 0		257						
UNK586 (UG/G)	90049 0		404						
UNK591 (UG/G)	90051 0		184						
UNK594 (UG/G)	90053 0		319						
UNK595 (UG/G)	90054 0		245						
UNK600 (UG/G)	90057 0		123						
UNK605 (UG/G)	90062 0								

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Y
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 30918 505849	3086 505872	BLK 505880	BLK 505881	BLK 505882	BLK 505890	BLK 505891	BLK 505892
DATE		6/25/85	07/03/85	6/25/85	7/8/85	7/9/85	07/03/85	07/03/85	07/03/85
TIME		819	1111	0	0	0	0	0	0
UNK609 (UG/G)	90066 0								
UNK524 (UG/G)	90015 0		637						
UNK533 (UG/G)	90021 0						1.02		
UNK557 (UG/G)	90031 0						0.408		
UNK612 (UG/G)	90066 0								
UNK615 (UG/G)	90071 0								
UNK637 (UG/G)	90089 0								
UNK523 (UG/G)	90092 0	* 0.261							
UNK585 (UG/G)	90102 0	* 0.506							
UNK636 (UG/G)	90088 0	* 0.727							
UNK660 (UG/G)	90120 0								
UNK532 (UG/G)	90020 0								
UNK618 (UG/G)	90073 0								
UNK633 (UG/G)	90065 0	* 0.392							
UNK513 (UG/G)	90116 0								
UNK639 (UG/G)	90122 0								
UNK638 (UG/G)	90090 0								

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Z
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3095A 505900	3095B 505901	3096A 505906	3096B 505907	3097A 505912	3097B 505913	3098A 505918	3098B 505919	3099A 505924	3099B 505925
DATE		07/11/85	07/11/85	07/11/85	07/11/85	7/10/85	7/10/85	7/10/85	7/10/85	6/24/85	6/25/85
TIME		828	846	725	740	1109	1129	958	1012	819	843
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99758 0	0	122	0	122	0	122	0	122	0	122
SITE TYPE 1	99759 0	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	S	S	S	S	S	S	S	S	S	S
MOISTURE(%WET WT)	70320 0	7.0	15.2	11.4	13.7	12.9	17.4	5.3	19.4	12.8	12.3
CADMIUM,SED (UG/G-DRY)	1028 0	0.7	<0.5	<0.5	0.8	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9
CR,SOIL (UG/G-DRY)	99584 0	15	11	16	18	7	<7	10	22	14	10
COPPER,SED (UG/G-DRY)	1043 0	17	13	22	17	7	<5	7	8	9	7
LEAD,SED (UG/G-DRY)	1052 0	20	<16	<16	<16	25	<17	18	<17	22	<17
ZINC,SED (UG/G-DRY)	1093 0	52	41	71	45	62	34	37	43	47	36
ARSENIC,SED (UG/G-DRY)	1003 0	21	<5.2	<5.2	29	6.2	<4.7	5.1	5.4	4.8	<4.7
MERCURY,SED (UG/G-DRY)	71921 0	0.09	<0.07	<0.07	<0.07	0.13	<0.05	0.07	<0.05	<0.05	<0.05
ALDRIN,SED (UG/G-DRY)	98356 0	<0.500	<0.500	<0.500	<0.500	<0.900	0.966	<0.900	<0.900	<0.900	0.91
DIELDRIN(UG/G-DRY)	98365 0	<0.600	<0.600	<0.600	<0.600	<0.300	0.616	<0.300	<0.300	<0.300	<0.300
DDT,PP'(UG/G-DRY)	98364 0	<2.00	<2.00	<2.00	<2.00	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400
ENDRIN (UG/G-DRY)	98369 0	<4.00	<4.00	<4.00	<4.00	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
CHLORDANE,SED(UG/G-DRY)	98361 0	<6.00	<6.00	<6.00	<6.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
DDE,PP'(UG/G-DRY)	98363 0	<0.500	<0.500	<0.500	<0.500	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.500	<0.500	<0.500	<0.500	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 36177
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3095A 505900	3095B 505901	3096A 505906	3096B 505907	3097A 505912	3097B 505913	3098A 505918	3098B 505919	3099A 505924	3099B 505925
DATE		07/11/85	07/11/85	07/11/85	07/11/85	7/10/85	7/10/85	7/10/85	7/10/85	6/24/85	6/25/85
TIME		828	846	725	740	1109	1129	958	1012	819	840
DIMP (UG/G-DRY)	98645 0	<3.00	<3.00	<3.00	<3.00	4.47	<0.500	<0.500	<0.500	<0.500	<0.500
DICHLORVOS (UG/G-DRY)	98646 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
HEXCLCYPENDI (UG/G-DRY)	98647 0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MALATHION (UG/G-DRY)	98648 0	<2.00	<2.00	<2.00	<2.00	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600
ISODRIN (UG/G-DRY)	98649 0	<0.600	<0.600	<0.600	<0.600	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
1,4 DITHIANE (UG/G-DRY)	98650 0	<2.00	<2.00	<2.00	<2.00	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<6.00	<6.00	<6.00	<6.00	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	0.436
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	0.663
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<1.00	<1.00	<1.00	<1.00	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400
ATRAZINE (UG/G-DRY)	98655 0	<0.500	<0.500	<0.500	<0.500	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
SUPONA (UG/G-DRY)	98656 0	<0.900	<0.900	<0.900	<0.900	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
DMMP (UG/G-DRY)	98657 0	<3.00	<3.00	<3.00	<3.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
ETY*PARATHION (UG/G-DRY)	98658 0	<2.00	<2.00	<2.00	<2.00	<0.700	<0.700	<0.700	<0.700	<0.700	<0.700
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0	NA	NA	NA	<0.400	NA	NA	NA	NA	NA	
CHLOROBENZENE (UG/G-DRY)	98681 0	NA	NA	NA	<0.300	NA	NA	NA	NA	NA	
CHLOROFORM (UG/G-DRY)	98682 0	NA	NA	NA	<0.700	NA	NA	NA	NA	NA	
1,1-DICHLOROETHANE (UG/G-DRY)	98683 0	NA	NA	NA	<0.500	NA	NA	NA	NA	NA	
1,2-DICHLOROETHANE (UG/G-DRY)	98684 0	NA	NA	NA	<0.400	NA	NA	NA	NA	NA	
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0	NA	NA	NA	<0.800	NA	NA	NA	NA	NA	

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Z
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # METHOD #	SAMPLE NUMBERS 3095A 505900	3095B 505901	3096A 505906	3096B 505907	3097A 505912	3097B 505913	3098A 505918	3098B 505919	3099A 505924	3099B 505925
DATE		07/11/85	07/11/85	07/11/85	07/11/85	7/10/85	7/10/85	7/10/85	7/10/85	6/24/85	6/25/85
TIME		828	846	725	740	1109	1129	958	1012	819	809
TRANS-1,2-DICHLOROETHENE(UG/G-D	98687 0	NA	NA	NA	<0.800	NA	NA	NA	NA	NA	
ETHYLBENZENE (UG/G-DRY)	98688 0	NA	NA	NA	<0.400	NA	NA	NA	NA	NA	
METHYLENE CHLORIDE (UG/G-DRY)	98689 0	NA	NA	NA		NA	NA	NA	NA	NA	
TETRACHLOROETHENE (UG/G-DRY)	98690 0	NA	NA	NA	<0.500	NA	NA	NA	NA	NA	
TOLUENE (UG/G-DRY)	98691 0	NA	NA	NA	<0.300	NA	NA	NA	NA	NA	
1,1,1-TRICHLOROETHANE(UG/G-D)	98692 0	NA	NA	NA	<0.500	NA	NA	NA	NA	NA	
1,1,2-TRICHLOROETHANE(UG/G-D)	98693 0	NA	NA	NA	<0.600	NA	NA	NA	NA	NA	
TRICHLOROETHENE (UG/G-DRY)	98694 0	NA	NA	NA	<0.600	NA	NA	NA	NA	NA	
M-XYLENE (UG/G-DRY)	98695 0	NA	NA	NA	<0.300	NA	NA	NA	NA	NA	
MIBK (UG/G-DRY)	98696 0	NA	NA	NA	<0.400	NA	NA	NA	NA	NA	
DMDS (UG/G-DRY)	98697 0	NA	NA	NA	<4.00	NA	NA	NA	NA	NA	
BENZENE (UG/G-DRY)	98699 0	NA	NA	NA	<1.00	NA	NA	NA	NA	NA	
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0	NA	NA	NA	<0.500	NA	NA	NA	NA	NA	
PCPHSO2 UG/G-DRY	98703 0	<0.400	<0.400	<0.400	<0.400	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
COORDINATE,N/S(SIP)	98392 0	181769	181769	181626	181626	181474	181474	181319	181319	181320	181320
COORDINATE,E/W(SIP)	98393 0	2185753	2185753	2186052	2186052	2185752	2185752	2186201	2186201	2186651	2186651
UNK634 (UG/G)	90086 0	NA	NA	NA							
UNK542 (UG/G)	90024 0	NA	NA	NA							
UNK608 (UG/G)	90065 0	NA	NA	NA							
UNK633 (UG/G)	90085 0	0.323									

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Z
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3095A 505900	3095B 505901	3096A 505906	3096B 505907	3097A 505912	3097B 505913	3098A 505918	3098B 505919	3099A 505924	3099B 505925
DATE		07/11/85	07/11/85	07/11/85	07/11/85	7/10/85	7/10/85	7/10/85	7/10/85	6/24/85	6/25/85
TIME		828	846	725	740	1109	1129	958	1012	819	548
UNK635 (UG/G)	90087 0				2.32						
UNK593 (UG/G)	90052 0	NA	NA	NA							
UNK609 (UG/G)	90066 0	0.323									
UNK632 (UG/G)	90084 0	NA	NA	NA							
UNK543 (UG/G)	90025 0	NA	NA	NA							
UNK579 (UG/G)	90043 0	0.323									
UNK544 (UG/G)	90026 0	NA	NA	NA							
UNK604 (UG/G)	90061 0		1.18								
UNK546 (UG/G)	90028 0	NA	NA	NA							
UNK548 (UG/G)	90029 0	NA	NA	NA							
UNK629 (UG/G)	90082 0	0.215		1.13							
UNK522 (UG/G)	90014 0	NA	NA	NA							
UNK517 (UG/G)	90012 0	NA	NA	NA							
UNK513 (UG/G)	90116 0										
UNK523 (UG/G)	90092 0									A 0.784	A 1.54
UNK532 (UG/G)	90020 0										
UNK655 (UG/G)	90119 0										
UNK636 (UG/G)	90088 0									A 1.00	A 1.31
UNK641 (UG/G)	90107 0									A 0.390	
UNK654 (UG/G)	90113 0									A 0.558	

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Z
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/DEFGOOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3095A 505900	3095B 505901	3096A 505906	3096B 505907	3097A 505912	3097B 505913	3098A 505918	3098B 505919	3099A 505924	3099B 505925
DATE		07/11/85	07/11/85	07/11/85	07/11/85	7/10/85	7/10/85	7/10/85	7/10/85	6/24/85	6/25/85
TIME		828	846	725	740	1109	1129	958	1012	819	845
UNK547 (UG/G)	90094 0										* 2.52
UNK637 (UG/G)	90089 0										
UNK527 (UG/G)	90017 0										
UNK614 (UG/G)	90070 0					* 1.63	* 1.21				
UNK538 (UG/G)	90123 0						* 1.73				
UNK610 (UG/G)	90124 0						* 1.24				

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Z
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3100A 505930	3100B 505931	3101A 505936	3101B 505937	3102A 505942	3102B 505943	3103A 505948	3103B 505949	3104A 505954	3104B 505955
DATE		06/20/85	06/20/85	6/24/85	6/24/85	06/20/85	06/20/85	06/20/85	06/20/85	06/20/85	06/21/85
TIME		1017	1030	736	751	913	931	823	837	739	752
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99758 0	0	122	0	122	0	122	0	122	0	122
SITE TYPE 1	99759 0	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE	BORE
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	S	S	S	S	S	S	S	S	S	S
MOISTURE(%WET WT)	70320 0	9.1	17.6	7.8	8.6	3.8	11.6	5.7	12.4	12.9	9.4
CADMIUM,SED (UG/G-DRY)	1028 0	<0.5	<0.5	<0.9	<0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CR,SOIL (UG/G-DRY)	99584 0	17	16	18	<7	9	11	16	15	21	11
COPPER,SED (UG/G-DRY)	1043 0	16	15	10	<5	13	11	15	14	17	12
LEAD,SED (UG/G-DRY)	1052 0	<16	<16	26	<17	<16	<16	<16	<16	<16	<16
ZINC,SED (UG/G-DRY)	1093 0	52	45	60	24	39	<28	44	41	59	<28
ARSENIC,SED (UG/G-DRY)	1003 0	<5.2	<5.2	6.9	<4.7	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
MERCURY,SED (UG/G-DRY)	71921 0	<0.07	<0.07	<0.05	<0.05	<0.07	<0.07	<0.07	0.16	<0.07	<0.07
ALDRIN,SED (UG/G-DRY)	98356 0	<0.500	<0.500	<0.900	<0.900	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
DIELDRIN(UG/G-DRY)	98365 0	<0.600	<0.600	<0.300	<0.300	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600
DDT,PP'(UG/G-DRY)	98364 0	<2.00	<2.00	<0.400	<0.400	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
ENDRIN (UG/G-DRY)	98369 0	<4.00	<4.00	<0.700	<0.700	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
CHLORDANE,SED(UG/G-DRY)	98361 0	<6.00	<6.00	<1.00	<1.00	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00
DDE,PP'(UG/G-DRY)	98363 0	<0.500	<0.500	<0.300	<0.300	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.500	<0.500	<0.300	<0.300	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 36177
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3100A 505930	3100B 505931	3101A 505936	3101B 505937	3102A 505942	3102B 505943	3103A 505948	3103B 505949	3104A 505954	3104B 505955
DATE		06/20/85	06/20/85	6/24/85	6/24/85	06/20/85	06/20/85	06/20/85	06/20/85	06/20/85	06/20/85
TIME		1017	1030	736	751	913	931	823	837	739	752
DIMP (UG/G-DRY)	98645 0	<3.00	<3.00	<0.500	<0.500	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
DICHLORVOS (UG/G-DRY)	98646 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
HEXCLCYPENDI (UG/G-DRY)	98647 0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MALATHION (UG/G-DRY)	98648 0	<2.00	<2.00	<0.600	<0.600	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
ISODRIN (UG/G-DRY)	98649 0	<0.600	<0.600	<0.300	<0.300	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600
1,4 DITHIANE (UG/G-DRY)	98650 0	<2.00	<2.00	<0.300	<0.300	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<6.00	<6.00	<0.300	<0.300	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	<0.005
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<1.00	<1.00	<0.400	<0.400	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
ATRAZINE (UG/G-DRY)	98655 0	<0.500	<0.500	<0.700	<0.700	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
SUPONA (UG/G-DRY)	98656 0	<0.900	<0.900	<0.500	<0.500	<0.900	<0.900	<0.900	<0.900	<0.900	<0.900
DNMP (UG/G-DRY)	98657 0	<3.00	<3.00	<2.00	<2.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
ETY*PARATHION (UG/G-DRY)	98658 0	<2.00	<2.00	<0.700	<0.700	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZENE (UG/G-DRY)	98681 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROFORM (UG/G-DRY)	98682 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE (UG/G-DRY)	98683 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE (UG/G-DRY)	98684 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 36177
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3100A 505930	3100B 505931	3101A 505936	3101B 505937	3102A 505942	3102B 505943	3103A 505948	3103B 505949	3104A 505954	3104B 505955
DATE		06/20/85	06/20/85	6/24/85	6/24/85	06/20/85	06/20/85	06/20/85	06/20/85	06/20/85	06/20/85
TIME		1017	1030	736	751	913	931	823	837	739	752
TRANS-1,2-DICHLORGET ENE(UG/G-D	98687 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE (UG/G-DRY)	98688 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE (UG/G-DRY)	98689 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLORDETHENE (UG/G-DRY)	98690 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOLUENE (UG/G-DRY)	98691 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-TRICHLORDETHAN E(UG/G-D)	98692 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLORDETHAN E(UG/G-D)	98693 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRICHLORDETHENE (UG/G-DRY)	98694 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
M-XYLENE (UG/G-DRY)	98695 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MIBK (UG/G-DRY)	98696 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DMDS (UG/G-DRY)	98697 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZENE (UG/G-DRY)	98699 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCPMSO2 UG/G-DRY	98703 0	<0.400	<0.400	<0.300	<0.300	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400
COORDINATE,N/S(STP)	98392 0	181019	181019	181021	181021	180721	180721	180721	180721	180721	180721
COORDINATE,E/W(STP)	98393 0	2186352	2186352	2186806	2186806	2186205	2186205	2186504	2186504	2186903	2186903
UNK634 (UG/G)	90086 0								0.457		
UNK542 (UG/G)	90024 0	>14.3					0.452		2.28		
UNK638 (UG/G)	90065 0		1.21				0.339	0.743	0.913	0.804	0.773
UNK633 (UG/G)	90085 0								1.14		

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 36177
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3100A 505930	3100B 505931	3101A 505936	3101B 505937	3102A 505942	3102B 505943	3103A 505948	3103B 505949	3104A 505954	3104B 505955
DATE		06/20/85	06/20/85	6/24/85	6/24/85	06/20/85	06/20/85	06/20/85	06/20/85	06/20/85	06/20/85
TIME		1017	1030	736	751	913	931	823	837	739	752
UNK635 (UG/G)	90087 0	2.20	1.21			7.28	3.39		3.42	5.74	0.773
UNK593 (UG/G)	90052 0	2.20									
UNK609 (UG/G)	90066 0	>6.60				1.04		1.06			
UNK632 (UG/G)	90084 0	2.20	4.85			2.08	1.13	2.12		1.15	1.10
UNK543 (UG/G)	90025 0									C.115	
UNK579 (UG/G)	90043 0		1.09			0.728	1.13	0.743		0.459	0.442
UNK544 (UG/G)	90026 0		2.43								
UNK604 (UG/G)	90061 0					3.12					
UNK546 (UG/G)	90028 0							2.12			
UNK548 (UG/G)	90029 0										>3.31
UNK629 (UG/G)	90082 0	NA	NA			NA	NA	NA	NA	NA	NA
UNK522 (UG/G)	90014 0										
UNK517 (UG/G)	90012 0	NA	NA			NA	NA	NA	NA	NA	NA
UNK513 (UG/G)	90116 0			* 1.71							
UNK523 (UG/G)	90092 0				* 1.42						
UNK532 (UG/G)	90020 0				* 0.869						
UNK655 (UG/G)	90119 0										
UNK636 (UG/G)	90088 0			* 1.00	* 0.722						
UNK641 (UG/G)	90107 0										
UNK654 (UG/G)	90113 0			* 0.565	* 0.342						

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Z
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS 3100A 505930	3100B 505931	3101A 505936	3101B 505937	3102A 505942	3102B 505943	3103A 505948	3103B 505949	3104A 505954	3104B 505955
DATE		06/20/85	06/20/85	6/24/85	6/24/85	06/20/85	06/20/85	06/20/85	06/20/85	06/20/85	06/20/85
TIME		1017	1030	736	751	913	931	823	937	739	752
UNK547 (UG/G)	90094 0										
UNK637 (UG/G)	90089 0			* 3.08							
UNK527 (UG/G)	90017 0				* 0.547						
UNK614 (UG/G)	90070 0										
UNK538 (UG/G)	90123 0										
UNK610 (UG/G)	90124 0										

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 36177
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS BLK 505980	BLK 505981	BLK 505982	BLK 505990	BLK 505991	BLK 505992
DATE		6/24/85	6/25/85	7/10/85	06/24/85	06/25/85	07/10/85
TIME		0	0	0	0	0	0
SAMPLE TYPE	71999 0	SO	SO	SO	SO	SO	SO
SAMPLE DEPTH(CM)	99758 0	0	0	0	0	0	0
SITE TYPE 1	99759 0	QCMB	QCMB	QCMB	QCMB	QCMB	QCMB
INSTALLATION CODE	99720 0	RK	RK	RK	RK	RK	RK
SAMPLING TECHNIQUE	72005 0	G	G	G	G	G	G
MOISTURE(%WET WT)	70320 0	2.0	2.0	2.0	2.0	2.0	2.0
CADMIUM,SED (UG/G-DRY)	1028 0	<0.9	NA	NA	<0.5	NA	NA
CR,SOIL (UG/G-DRY)	99584 0	11		NA	12		
COPPER,SED (UG/G-DRY)	1043 0	10		NA	12		
LEAD,SED (UG/G-DRY)	1052 0	<17		NA	<16		
ZINC,SED (UG/G-DRY)	1093 0	41		NA	34		
ARSENIC,SED (UG/G-DRY)	1003 0	<4.7		NA			
MERCURY,SED (UG/G-DRY)	71921 0	<0.05		NA	<0.07	<0.07	0.10
ALDRIN,SED (UG/G-DRY)	98356 0	<0.900			<0.500	<0.500	
DIELDRIN(UG/G-DRY)	98365 0	<0.300			<0.600	<0.600	
DDT,PP'(UG/G-DRY)	98364 0	<0.400			<2.00	<2.00	
ENDRIN (UG/G-DRY)	98369 0	<0.700			<4.00	<4.00	
CHLORDANE,SED(UG/G-DRY)	98361 0	<1.00			<6.00	<6.00	
DDE,PP'(UG/G-DRY)	98363 0	<0.300			<0.500	<0.500	
1,4 OXATHIANE (UG/G-DRY)	98644 0	<0.300			<0.500	<0.500	

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 36172
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS BLK 505980	BLK 505981	BLK 505982	BLK 505990	BLK 505991	BLK 505992
DATE		6/24/85	6/25/85	7/10/85	06/24/85	06/25/85	07/10/85
TIME		0	0	0	0	0	0
DIMP (UG/G-DRY)	98645 0	<0.500			<3.00	<3.00	
DICHLORVOS (UG/G-DRY)	98646 0	<0.300			<0.300	<0.300	
HEXCLCYPENDI (UG/G-DRY)	98647 0	<1.00			<1.00	<1.00	
MALATHION (UG/G-DRY)	98648 0	<0.600			<2.00	<2.00	
ISODRIN (UG/G-DRY)	98649 0	<0.300			<0.600	<0.600	
1,4 DITHIANE (UG/G-DRY)	98650 0	<0.300			<2.00	<2.00	
DICYCLOPENTADIENE (UG/G-DRY)	98651 0	<0.300			<6.00	<6.00	
DBCP(NEMAGON) (UG/G-DRY)	98652 0	<0.005			<0.005		
P-CLPHENYLMETHYSULFIDE(UG/G-D)	98653 0	<0.300			<0.300	<0.300	
P-CLPHENYLMETHYSULFONE(UG/G-D)	98654 0	<0.400			<1.00	<1.00	
ATRAZINE (UG/G-DRY)	98655 0	<0.700			<0.500	<0.500	
SUPONA (UG/G-DRY)	98656 0	<0.500			<0.900	<0.900	
DMMP (UG/G-DRY)	98657 0	<2.00			<3.00	<3.00	
ETY*PARATHION (UG/G-DRY)	98658 0	<0.700			<2.00	<2.00	
CARBON TETRACHLORIDE (UG/G-DRY)	98680 0						
CHLOROBENZENE (UG/G-DRY)	98681 0						
CHLOROFORM (UG/G-DRY)	98682 0						
1,1-DICHLOROETHANE (UG/G-DRY)	98683 0						
1,2-DICHLOROETHANE (UG/G-DRY)	98684 0						
BICYCLOHEPTADIENE (UG/G-DRY)	98686 0						

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Z
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS BLK 505980	BLK 505981	BLK 505982	BLK 505990	BLK 505991	BLK 505992
DATE		6/24/85	6/25/85	7/10/85	06/24/85	06/25/85	07/10/85
TIME		0	0	0	0	0	0
TRANS-1,2-DICHLORDET ENE(UG/G-D	98687 0						
ETHYLBENZENE (UG/G-DRY)	98688 0						
METHYLENE CHLORIDE (UG/G-DRY)	98689 0						
TETRACHLORDETHENE (UG/G-DRY)	98690 0						
TOLUENE (UG/G-DRY)	98691 0						
1,1,1-TRICHLORDETHAN E(UG/G-D)	98692 0						
1,1,2-TRICHLORDETHAN E(UG/G-D)	98693 0						
TRICHLORDETHENE (UG/G-DRY)	98694 0						
M-XYLENE (UG/G-DRY)	98695 0						
MIBK (UG/G-DRY)	98696 0						
DMDS (UG/G-DRY)	98697 0						
BENZENE (UG/G-DRY)	98699 0						
O-AND/OR P-XYLENE (UG/G-DRY)	98700 0						
PCPHSOZ UG/G-DRY	98703 0	<0.300			<0.400	<0.400	
COORDINATE,N/S(SIP)	98392 0						
COORDINATE,E/W(SIP)	98393 0						
UNK634 (UG/G)	90086 0						
UNK542 (UG/G)	90024 0						
UNK608 (UG/G)	90065 0						
UNK633 (UG/G)	90085 0						

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Z
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/DERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS BLK 505980	BLK 505981	BLK 505982	BLK 505990	BLK 505991	BLK 505992
DATE		6/24/85	6/25/85	7/10/85	06/24/85	06/25/85	07/10/85
TIME		0	0	0	0	0	0
UNK635 (UG/G)	90087					1.02	
	0						
UNK593 (UG/G)	90052						
	0						
UNK609 (UG/G)	90066						
	0						
UNK632 (UG/G)	90084						
	0						
UNK543 (UG/G)	90025						
	0						
UNK579 (UG/G)	90043				0.612		
	0						
UNK544 (UG/G)	90026						
	0						
UNK604 (UG/G)	90061						
	0						
UNK546 (UG/G)	90028						
	0						
UNK548 (UG/G)	90029						
	0						
UNK629 (UG/G)	90082						
	0						
UNK522 (UG/G)	90014				0.306		
	0						
UNK517 (UG/G)	90012						
	0						
UNK513 (UG/G)	90116	▲ 0.485					
	0						
UNK523 (UG/G)	90092	▲ 0.818					
	0						
UNK532 (UG/G)	90020	▲ 0.557					
	0						
UNK655 (UG/G)	90119	▲ 0.370					
	0						
UNK636 (UG/G)	90068						
	0						
UNK641 (UG/G)	90107						
	0						
UNK654 (UG/G)	90113						
	0						

ENVIRONMENTAL SCIENCE & ENGINEERING 01/11/86 STATUS: PRELIMINARY

PROJECT NUMBER 84936300
FIELD GROUP: 3617Z
PARAMETERS: ALL SAMPLES: ALL

PROJECT NAME SECTION 36 RMA
PROJECT MANAGER: BILL FRASER
FIELD GROUP LEADER: GEISZLER/BERGDOLL

PARAMETERS	STORET # / METHOD #	SAMPLE NUMBERS BLK 505980	BLK 505981	BLK 505982	BLK 505990	BLK 505991	BLK 505992
DATE		6/24/85	6/25/85	7/10/85	06/24/85	06/25/85	07/10/85
TIME		0	0	0	0	0	0
UNK547 (UG/G)	90094						
	0						
UNK637 (UG/G)	90089						
	0						
UNK527 (UG/G)	90017						
	0						
UNK614 (UG/G)	90070						
	0						
UNK538 (UG/G)	90123						
	0						
UNK610 (UG/G)	90124						
	0						